





FIG Working Week 2013

Abuja, Nigeria 6–10 May TECHNICAL PROGRAM



ENVIRONMENT FOR SUSTAINABILITY



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THE FEDERAL CAPITAL TERRITORY ADMINISTRATION (FCTA)



The FIG Working Week 2013 **Technical Program**

Saturday, 4 May 2013

Sunday, 5 May 2013

Joint UN-Habitat GLTN and **FIG Social Tenure Domain** Model (STDM) Training of

Trainers Workshop for Young Surveyors /Professionals

Saturday, 4 May 09:00-17:00 Venue: Obafemi Hall, NLH Chair: Ms. Kate Fairlie, Chair of FIG Young Surveyors Network Rapporteur: Ms. Eva-Maria Unger, Chair Elect of FIG Young Surveyors Network

- Mr. Danilo Antonio, Global Land Tool Network (GLTN) **UN-Habitat**
- Mr. Solomon Njogu, Global Land Tool Network (GLTN) **UN-Habitat**
- Closed event

Registration Desk

The registration desk for international delegates is located at the Ground Floor, and for Nigerian delegates at the Lower Floor of Nicon Luxury Hotel.

Opening Hours:

- Sunday 5 May 13:00-18:00 Monday 6 May 08:00-18:00 08:00-18:00 Tuesday 7 May Wednesday 8 May 08:00-18:00 - Thursday 9 May 08:00-18:00
- Friday 10 May 08:00-16:00

Speakers' Preparation Room

The Speakers' Preparation Room is located at the Nicon Luxury Hotel. Upon arrival please ask at the registration desk for direction.

Opening hours:

- Monday 6 May 12:00-18:00 Tuesday 7 May 08:00-18:00 Wednesday 8 May 08:00-18:00
- Thursday 9 May 08:00-18:00

FIG ACCO Meeting Sunday, 5 May 09:00-17:00

Venue: Lagos, NLH Chair: Prof. Rudolf Staiger, FIG Vice President, Germany

- Chairs of FIG Commissions - By invitation only

Joint UN-Habitat GLTN and **FIG Social Tenure Domain** Model (STDM) Training of **Trainers Workshop for Young Surveyors / Professionals** Sunday, 5 May 09:00-17:00 Venue: Obafemi Hall, NLH Chair: Ms. Kate Fairlie, Chair of FIG Young Surveyors Network Rapporteur: Ms. Eva-Maria **Unger**, Chair Elect of FIG Young Surveyors Network Closed event

FIG Council Meeting

Sunday, 5 May 17:00-19:00 Venue: Ebonyi, NLH Commission: FIG Council Chair: Mr. CheeHai Teo, FIG President

Sunday, 5 May 20:00-23:00 Venue: To be announced By invitation only

- By invitation only

NIS Dinner

FIG General Assembly – First Session – cont.

Monday, 6 May 13:00-15:00 Venue: Conference Hall, NLH Chair: Mr. CheeHai Teo, FIG President

Monday, 6 May 2013

FIG General Assembly -

Monday, 6 May 09:00-12:00

Venue: Conference Hall, NLH

Chair: Mr. CheeHai Teo, FIG

Joint UN-Habitat GLTN and

FIG Social Tenure Domain

Model (STDM) Training of

Surveyors /Professionals

Venue: Obafemi Hall, NLH

Monday, 6 May 09:00-17:00

Trainers Workshop for Young

Chair: Ms. Kate Fairlie, Chair of

FIG Young Surveyors Network

Rapporteur: Ms. Eva-Maria

Unger, Chair Elect of FIG

Young Surveyors Network - Closed event

- For all FIG members

- Open for observers

Session I

President

- For all FIG members
- Open for observers

Welcome Reception

Monday, 6 May 16:00–19:00 Pool Area, NLH

- All registered participants as well as accompanying persons are invited to attend the official Welcome Reception. This is an excellent opportunity to renew old friendships and make new acquaintances as we welcome you to Abuja with a flavor of Nigerian culture.

Tuesday, 7 May 2013

Opening Ceremony

Tuesday, 7 May 09:00–10:30 Venue: Africa Hall, ICC

- All delegates and registered accompanying persons are invited to attend the official **Opening Ceremony. You** will be greeted by Ushers dressed to reflect the culture spectrum of Nigeria with traditional music and dances at the entrance to the Africa Hall. We are pleased to announce that the President of the Federal Republic of Nigeria, Dr. **Goodluck Ebele Jonathan** will be the quest speaker.

Tuesday 11:00-12:30

Plenary Session 1:

Governance and Approaches Tuesday, 7 May 11:00–12:30 Venue: Africa Hall, ICC Chair: Mrs. Chryssy Potsiou, FIG Vice President, Greece Rapporteur: Mr. Olumide Adewebi, Secretary General, NIS Co-Chair

- Dr. Joan C. Kagwanja, Chief Land Policy Initiative, UNECA
- Mr. Remy Sietchiping, Project leader, Global Land Tool Network (GLTN) UN-Habitat
- Prof. Peter O. Adenivi, Chairman, Presidential Technical Committee on Land Reform, Nigeria



Tuesday, 7 May 2013 14:30-16:00

FIG Academic Members Forum

Tuesday, 7 May 14:30–16:00 Venue: Ahmadu Bello Hall, NLH Chair: Dr. Chryssy Potsiou, FIG Vice President, Greece

- This Forum is for FIG Academic Members as well as interested participants who are from academic and research institutions to meet and discuss developments, challenges and opportunities within the academic and research arena

Joint UN-Habitat GLTN/ FIG Surveyor Generals Roundtable/Director **Generals Forum**

Tuesday, 7 May 14:30–16:00 Venue: Lagos, NLH Facilitator: Dr. Solomon Abebe Haile, GLTN Rapporteur and Summary: Dr. Christiaan Lemmen, FIG OICRF

- This joint session brings together chief executives or director generals (or their representatives/nominees) of national mapping, cadastral and land administration organizations from around the world to discuss among peers approaches to safequard, secure, support and sustain land rights for all - By invitation only

Africa Task Force: What Future for Land Professionals in Africa

Tuesday, 7 May 14:30–16:00 Venue: Niger Hall, ICC Chair: Ms. Diane Dumashie, Chair, FIG Task Force on Africa Rapporteur: Mrs. Gertrude N. Njar, Nigeria

- Panel discussion

TS01A – Administration in Africa 1

Tuesday, 7 May 14:30-16:00 Venue: Executive Hall, ICC Commission: 7 Chair: Ms. Diane Dumashie, Chair, Chair: Mr. Volker Schwieger, FIG Task Force on Africa Rapporteur: Mr. Peter Laarakker, Netherlands

Muhammad Bashar Nuhu (Nigeria):

An Appraisal of the Need for a Comprehensive National Policy for Land Management in Nigeria (6458)

Tarek Zein (Germany), Zerihun Amdemariam Berisso (Ethiopia) and Paul Hartfiel (Germany): Addis Ababa: The Road Map to Progress through Securing Property Rights with Real Property Registration System (6648)

Frank Pichel (USA), Chiemeka Ngwu (Nigeria), Nigel Edmead (United Kingdom) and Bassev Ika Oqua (Nigeria): Streamlining Land Administration

and Governance in Cross River State, Nigeria (6572)

Bareng Malatsi (Botswana) and Åke Finnström (Sweden): Progress of Reformation of Land Administration in Botswana (6589)

TS01B – National Geodesv and

Geospatial Infrastructure I Tuesday, 7 May 14:30–16:00 Venue: Conference Hall I, NLH Commission: 5 Germanv Rapporteur: Mr. Rui Fernandes, Portugal

Peter C. Nwilo, Joseph D. Dodo, Reuben U. Edozie and Adeyemi Adebomehin (Nigeria): The Nigerian Geocentric Datum (NGD2012): Preliminary Results (6524)

Aune Rummukainen (Finland): Land Uplift and Its Effects in Finland – the Bothnian Bay as an Example (6389)

Ebenezer Yemi Ogunbadewa (Nigeria):

Designing a Geospatial Framework for Land Administration in Ondo State of Nigeria (6302)

Ugochukwu Edozie and Adeyemi Adebomehin (Nigeria): Development and Sustainability of NIGNET - Nigerian GNSS Network and the Relation with AFREF (6631)

Chukwubueze Onwuzuliabo, Victor Nnam and Joseph **Eiikeme** (Nigeria): Adequate Geodetic Infrastructure: The First Step to Sustainable Development (6447)

TS01C – Water

Tuesday, 7 May 14:30–16:00 Venue: Conference Hall III, NLH Commission: 8 Chair: Mr. Wafula Nabutola, Chair of FIG Commission 8, Kenva Rapporteur: Mrs. Benedicta Ugwulebo, Nigeria

Mingzhou Qin, Bin Li and Zhang **Pengyan** (China, PR): High Population Beaches Land Safety Use Planning of the Yellow **River Lower Reaches Under the** Conditions of Artificial Flood Control (6579)

Adedavo Alagbe, Stephen Aboderin and Oluwole Adeniran (Nigeria): Delineation of Flood Vulnerable

Zones and Disaster Risk Management along Asa River: a GIS Approach (6636)

P. C Nwosu,, D. N. Olayinka, and **P. C. Nwilo**, (Nigeria): Generation of flood maps and drainage basin of Umueze Anam (6647)

Isola Ajibola and Mansor Shattri (Malavsia): UAV-Based Imaging for Environmental Sustainability – Flash Floods Control Perspective (6548)

Godstime James, Shaba Halilu, Alhassan Nuhu, Alade Teslim and **Gabriel Yusuf** (Nigeria): Space-Based Disaster Management in Nigeria: The Role of the International Charter "Space and Maior Disasters" (6539)

Macbeda Uche Michael-Agwuoke (New Zealand) and **B. O. Ekpete** (Nigeria): Adding value to municipal solid waste in Nigeria through mapping (6550)

TS01D – GeoSpatial **Applications**

Tuesday, 7 May 14:30–16:00 Venue: Conference Hall II, NLH Commission: 3 Chair: Prof. Francis Faiemirokun, Nigeria Rapporteur: Prof. Oliver Ojinnaka, Nigeria

Madi-Jimba Yahya Yahya (Kenya):

Geographic Information Tools in the Service of Heritage Conservation in a World Heritage Site (6372)

Obinna Aneiionu, Francis Okeke, Elochukwu Moka and Victus Uzodinma (Nigeria): Mapping Spatiotemporal Variations of Land Surface Temperature in South East Nigeria with Landsat (6427)

Njike Chigbu (Nigeria): The Role of Geospatial Technologv in Environmental Sustainability in Nigeria – an Overview (6555)

Anthony Adeove (Nigeria): Towards the development of Spatially Enabled e-Land Administration for Good Governance in Lagos State: Benefits and Risks (6557)

Elzbieta Bielecka (Poland): Data Integration within Public Property Management Systems (6575)

TS01E – Surveying Today and Tomorrow

Tuesday, 7 May 14:30–16:00 Venue: Obafemi Hall, NLH Commission: 1 Chair, Mr. Winston Aveni, Nigeria Rapporteur: Mrs. Benedicta Ugwulebo, Nigeria

Francois Mazuver (France) and Marc Vanderschueren (Belgium): The Federation of French Speaking Surveyors (6676)

Fosu Brempong (Ghana):

Geographical Information System (GIS) For Nation Building and Good Governance in Africa Continent (6591)

Brian J Coutts (New Zealand): Redefining the Profession of Land Surveying (6558)

Leonie Newnham (Australia):

A New Way of Working for Surveying Professionals – How the Changes to Communications and Social Media are Creating New Opportunities for Connecting to Others (6617)

Rafic Khouri (France): The Licensed Surveyor in the French city (6686)

Michael Cramer, Volker Schwieger, Dieter Fritsch, Wolfgang Keller and Alfred Kleusberg (Germany): GEOENGINE - The University of Stuttgart International Master Program with More than 6 years of Experience (6689)

Tuesday, 7 May 2013 16:30-18:00

French Speaking Session – Cadastre

Tuesday, 7 May 16:30–18:00 Venue: Ahmadu Bello Hall, NLH Chair: Mr. **Marc Vander**schueren, Belgium Rapporteur: Mr. **Francis Roy**, Canada

Marc Vanderschueren

(Belgium): Bornage, Bonne pratique et la Convention entre le Géomètre privé et le Cadastre belge. Boundary demarcation, Best Practices and the Convention between the Private Surveyors and the Belgian Cadastre (6541)

Rafic Khouri (France):

Geographic Distribution of Licensed Surveyors in France and Their Public Service Delegation. Répartition des géomètres experts sur le territoire français pour assurer la délégation de service public (6657)

André Houssein (Madagascar) and Marc Vanderschueren (Belgium):

From de Torrens System to the Multipurpose Cadastre. Opportunities and Procedures for applying in the Case of Madagascar. Du système Torrens au cadastre polyvalent. Opportunités et modalités d'application dans le cas de Madagascar (6700)

François Luanda Lutahera, Valentin Basubi Lungele and Méthode Bagurubumwe Uhoze (Democratic Republic

concord (Concord): Le Rôle du Géomètre au Kivu. The Role of the Surveyor in the Province of Kivu (6707)

Roch Bah (Benin):

The Feasibility of an Integral Cadastre in the South of Sahara (Africa). La Faisabilité d'un Cadastre Intégral en Afrique, au Sud du Sahara (6709)

TS02A – Administration in Africa 2

Tuesday, 7 May 16:30–18:00 Venue: Executive Hall, ICC Commission: 7 Chair: Mr. **Ari Tella**, Finland Rapporteur: Dr. **David Mitchell**, Australia

Gary Strong, Alexander

Aronsohn and Ben Elder (United Kingdom): Innovative Approaches To Spatially Enabling Land Administration and Management (6716)

Eunice Macharia and Winnie Mwangi (Kenya):

The Role of Professional Bodies in Formulation of Government Policy Through Research. A Case Study of the Institution of Surveyors of Kenya Research on Devolved System of Governance (6595)

Olusola Atilola (Nigeria): Systematic Land Titling and Registration in Nigeria: Geoinformation Challenges (6653)

Kingsley Orisakwe and Gidado Bakari (Nigeria):

On the Development of Cadastral Information System for Part of Kofare Government Residential Area in Jimeta-Yola in Adamawa State of Nigeria (6678)

YSN: Workshop/Discussion on Crowd Sourcing Information and Using Social Networking

Tuesday, 7 May 16:30–18:00 Venue: Benue Hall, ICC Commission: 1, 2, 9 and 10 Chair: Ms. **Kate Fairlie**, Chair of FIG Young Surveyors Network Rapporteur: Ms. **Eva-Maria Unger**, Chair Elect of FIG Young Surveyors Network

TS02B – National Geodesy and

Geospatial Infrastructure II Tuesday, 7 May 16:30–18:00 Venue: Conference Hall I, NLH Commission: 5 Chair: Mr. Ivo Milev, Germany Rapporteur: Mr. Pasi Häkli, Finland

Bashkim Idrizi (Macedonia, FYROM): Developing Model for Utilization of Global Earth Gravimetrical Models in Macedonian Territory (6597)

Rui Fernandes (Portugal), Mustapha Meghraoui (France), Jorge Miguel Miranda and Machiel Bos (Portugal): Present-day strain field of Africa derived from the GNSS Velocity Field (6628)

Victus Uzodinma and Raphael Ehigiator-Irughe (Nigeria): Removal of Inconsistencies Arising from Multiplicity of Transformation Parameters in Nigeria (6552)

Matthew N. Ono, Chukwubeze Onwuzuligbo and Timothy Ogonobo (Nigeria):

Evaluating Geodetic Control Network of Awka Capital Territory of Anambra State for Sustainable Development (6363)

Abayomi Ayoola, Adeyemi Adebomehin, Kufre Eko (Nigeria) and S Andre (Portugal): The role of CORS GNSS data for climate monitoring: case study using the NIGNET network (6632)

Joint UN-Habitat GLTN/ FIG Surveyor Generals Roundtable/Director Generals Forum Tuesday, 7 May 16:30–18:00 Venue: Lagos, NLH

Venue: Lagos, NLH Facilitator: Dr. Solomon Abebe Haile, GLTN Rapporteur and Summary: Dr. Christiaan Lemmen, FIG OICRF

- By invitation only

TS02C – Landuse and Landcover

Tuesday, 7 May 16:30–18:00 Venue: Conference Hall III, NLH Commission: 8 Chair: Mr. **Anthony Adeoye**, Nigeria Rapporteur: **V. C. Nnam**, Nigeria

Raphael Olaniyi Oyinloye

(Nigeria) and **Joseph Oloukoi** (Benin): An assessment of the Pull between Landuse and Landcover in Southwestern Nigeria and the Ensuing Environmental Impacts (6685)

Kurotiminipre Appah L and Winston Ayeni Abayomi (Nigeria): Land Use / Land Cover changes in Yenagoa, Bayelsa State (6384)

Zhang Yan-yu, Wang Jing and **Jin Zhi-feng** (China, PR): Spatial Strategy for Regional Land Use –A Case Study in Jiangsu Province (6560)

Michael Oke (Nigeria): Agricultural and Rural Development Strategist: a Case Study of the Effort of the Millennium Development Goal Office in the Federal Capital Territory in Improving Food Security in Nigeria (6326)

TS02D – GIS, Mapping Technology and GeoSpatial Implementations

Tuesday, 7 May 16:30–18:00 Venue: Conference Hall II, NLH Commission: 3

Chair: Prof. **Yerach Doytsher**, Chair of FIG Commission 3, Israel Rapporteur: Prof. **Bashkim Idrizi**, Macedonia

Shlomi Sivan (Israel):

3D-GIS in the Cloud. The future of GIS (6501)

Wali Islam (Nigeria) and Shattri Mansor (Malaysia): Design and Implementation of an Open Source Web-based GIS Framework for Rapid Development of Business Intelligence Applications (6592)

Li Zonghua (China, PR):

SDI Construction and its Applications in Wuhan Municipality, China (6662) This paper will not be presented at the Working Week

Stanley Iwundu (Nigeria): Environment for Sustainability (6670)

Ekpo Effiong, Felix Iyiola, Mary Liwhu, Phillip Ibe and Adedayo Alagbe (Nigeria): Inventory of Tourism in Crossriver State, Nigeria Using GIS (6683)

Alaaya Bolaji Abdulhaleem, Adetimirin Oluwafemi Idowu and Alagbe Adedayo Olujobi (Nigeria):

Investigation of Ground Water Reservoir in ASA and Ilorin West Local Government of Kwara State Using Geographic Information System (6694)

Tuesday 19:30-23:00

Nigerian Evening / FIG Foundation Dinner

Tuesday, 7 May 19:30–23:00 Venue: The Conference Hall, NLH

- The dinner offers a night of rich displays of Nigerian culture and art with a three course dinner of the delicious Nigerian cuisine. One of the guest speakers will be the Minister of the Federal Capital Territory, Senator Bala Abdulkadir Muhammed.
- Sponsored by Trimble
- A ticket is required

Wednesday 08:00-09:00

Wednesday, 8 May 2013 09:00-10:30

FIG Commission Annual Meeting

Wednesday, 8 May 08:00–09:00 Commission: FIG Commission delegates 1–5

Meetings in following rooms:

- Commission 1: Obifema Hall
- Commission 2: Benue Hall
- Commission 3: Niger Hall
- Commission 4: Ahmadu Bello Hall
- Commission 5: Conference Hall III

TS03A – Land Administration

and Sustainable Development Wednesday, 8 May 09:00–10:30 Venue: Executive Hall, ICC Commission: 7 Chair: Mr. Peter van Oesterom, Netherlands Rapporteur: Mr. Ari Tella, Finland

Co Meijer (Netherlands): Essential Balance between the Business and ITC to Support Sustainable Land Administration (6714)

Juhana Hiironen and Kirsikka Niukkanen (Finland): Possibilities to Reduce Nutrient Loads to Water System in Land Consolidations (6431) This is a peer reviewed paper.

David Mitchell (Australia): How an Effective Spatial Data Infrastructure Can Support Land Administration in Vietnam? (6440) *This is a peer reviewed paper.*

Paul van der Molen

(Netherlands): How Land Administration Can Contribute to Food Security (6471)

Ludmiła Pietrzak (Poland):

Importance of a Real Estate Cadastre as the Basic, Reference Public Register in the Sustainable Country Development (6513)



TS03B – Remote Sensing for Landuse and Planning Wednesday, 8 May 09:00–10:30

Venue: Ahmadu Bello Hall, NLH Commission: 7 and 9 Chair: Mr. **Tommy Österberg**, Sweden Rapporteur: Mr. **Nuhu Muhammed**, Nigeria

Victor, Chukwuemeka Nnam, John, Okwor Nnam and Uchechukwu Godwin Nnam (Nigeria): Assessment of Urban Develop-

ment Using Supervised Classification of Remotely Sensed Imageries and GIS, A Case Study of Independence Layout (Part of), Enugu, Nigeria (6388) This is a peer reviewed paper.

Obinna Anejionu, Peter Nwilo and **Elijah Ebinne** (Nigeria): Long Term Assessment and Mapping of Erosion Hotspots in South East Nigeria (6448)

Innocent C. Ezeomedo and Joel Igbokwe (Nigeria):

Mapping and Analysis of Landuse and Landcover for Sustainable Development Using High Resolution Satellite Images and GIS Technique (6421) *This is a peer reviewed paper.*

Henry Odunsi (Nigeria): Remote Sensing and Environmental Management of Nigeria's Coastal wetlands (6378)

Godwin, Uchechukwu Nnam, John, Okwor Nnam and Victor Chukwuemeka Nnam (Nigeria): Object Based Image Classification for Mapping Urban Land Cover Pattern; A case study of Enugu Urban, Enugu State, Nigeria (6387)

TS03C – Positioning and Navigation – Today and Tomorrow

Wednesday, 8 May 09:00–10:30 Venue: Conference Hall I, NLH Commission: 5 Chair: Mr. **Dirk Kowalewski**, Germany Rapporteur: Mr. **Dennis Killian**, Germany

Volker Schwieger (Germany) and Mikael Lilje (Sweden): Innovative and Cost-effective Spatial Positioning (6692)

Rui Fernandes, João Palma, Hugo Valentim, Pedro Venâncio and Nuno Gonçalves (Portugal): Optimizing GNSS CORS Networks at Remote Locations (6630)

Ogundipe Oluropo (United Kingdom): The Smart Phone as a Surveying Tool (6626) *This is a flash presentation*.

Jad Jarroush (Israel): Regular Digital Camera as a Practical Geodetic Measurement Tool: Issues and Challenges (6515)

Gintcho Kostov (Bulgaria): Applying of the Mobile Versions of Google Earth and AutoCAD for Field Control of a Specialized map of a Large Urban Garden (6660) *This is a flash presentation*.

TS03D – The Use of Geoinformation

Wednesday, 8 May 09:00–10:30 Venue: Conference Hall III, NLH Commission: 8 Chair: Prof. **Francis Okeke**, Nigeria Rapporteur: Dr. **Lola Olayinka**, Nigeria

Oloyede Kosoko (Nigeria):

Geospatial Application in Public Health: Using Geographical Information Systems to Model the Spread of Tuberculosis (6313)

Rohan Bennett, Jaap Zevenbergen (Netherlands), Monica Lengoiboni (Rwanda), Gordon Okuma Wayumba and Shadrack Omondi (Kenya): The Pastoralist's Parcel: Towards Better Land Tenure Recognition and Climate Change Response in Kenya's Dry Lands (6556)

Wasieu Adedamola Akewusola

(Nigeria): Social Housing: A Means of Even Development for the Developing Nations – Nigeria as a Case Study (6312)

Matthew Ibitoye and Aderemi Adediji (Nigeria): Relating Urban Parameters to Gully Development in Southwestern Nigeria (6571)

Wafula Nabutola (Kenya):

Legalization Framework for Informal Development and the Built Environment in Kenya (6695)

TS03E – Surveying Education in Africa

Wednesday, 8 May 09:00–10:30 Venue: Obafemi Hall, NLH Commission: 2 Chair: Mrs. **Liza Groenendijk**, Netherlands Rapporteur: Mr. **Steven Frank**, Chair of Commission 2, United States

Liza (E.M.C.) Groenendijk (Netherlands), Seid Hussen (Ethiopia), Monica Lengoiboni (Rwanda), Moses Musinguzi (Uganda) and Gordon Wayumba (Kenya): Land Administration Academic Education in Eastern Africa (6469)

Anwuri Okwere (Nigeria): Enhancing Survey Training in the third millennium (6434)

Jennifer, Eziaku Chigbu and Unekwuojo Pamella Agbonika (Nigeria):

Role of "Women in Surveying" in Environmentally Sound and Sustainable Development (6627)

Chan KH (Hong Kong SAR, China): Assessing Sustainable Higher Education for Surveying and Construction (6436) *This is a peer reviewed paper.*

Joint UN-Habitat/FIG Commission 7 Session on Participatory and Inclusive Land Readjustment (PiLAR) Wednesday, 8 May 09:00–10:30

Venue: Benue Hall, ICC

Commission: 7

Chair: Mr. Christiaan Lemmen, Netherlands

Rapporteur: Ms. Kate Fairlie, Chair of FIG Young Surveyors Network – Christiaan Lemmen (Netherlands): Land Readjustment: An In-

- troduction
- Abebe Haile Solomon (Kenya): "Participatory and Inclusive Land Readjustment" (PILaR) as a governance tool to reduce Slums and Promote Orderly City Extension
- Danilo Antonio (Kenya): UN-Habitat Policy Paper on Land Readjustment
- Panel Discussion: Land Re-adjustment, UN-Habitat and FIG

Member Association's Presidents/Head of Delegation Forum

Wednesday, 8 May 09:00–10:30 Venue: Niger Hall, ICC Chair: Surv. (Hon) **Bode** Adeaga, NIS President

 This Forum brings together Presidents (or their representatives) or Heads of Delegation of Member Associations and provide them the opportunity to meet, network and discuss

Wednesday 11:00-12:3

Wednesday, 8 May 2013 14:30-16:00

Plenary Session 2: Technologies and Systems Wednesday, 8 May 11:00–

12:30 Venue: Africa Hall, ICC Chair: Mr. John Hannah, Chair, FIG Task Force on Surveyors and Climate Change Rapporteur: Mr. Gene Amako, Vice President – International Affairs NIS Co-Chair

- Dr. Hussein Omar Farah, Director General, Regional Centre for Mapping of Resources for Development (RCMRD)
- Surv. (Prof.) Peter C.
 Nwilo, Surveyor General, Office of the Surveyor-General of the Federation, Nigeria
- Mr. Bryn Fosburgh, Vice President, Divisional, Trimble Navigation Ltd

Joint UN-Habitat GLTN/FIG Surveyor Generals Roundtable/ Director Generals Forum Wednesday, 8 May 14:30–16:00

Venue: Lagos, NLH Facilitator: Prof. **Rudolf Staiger**, FIG Vice President Rapporteur and Summary: **Jean Du Plessis**, GLTN

Task Force on Property and Housing

By invitation only

Wednesday, 8 May 14:30–16:00 Venue: Benue Hall, ICC Chair: Dr. **Chryssy Potsiou**, Chair, FIG Task Force on Housing and Property

Rapporteur: Mr. **Collins Kowuor**, Kenya

- Úgo Chime, Member Board of Trustees of the Real Estate Development Association of Nigeria (REDAN): Informal Development in Nigeria
- Anthony Okwa, Immediate Past Executive Secretary, Real Estate Development Association of Nigeria (REDAN): Social Housing/Affordable Housing Policy in Nigeria

TS04A – Innovative Cadastre and Land Rights Management Wednesday, 8 May 14:30–16:00 Venue: Executive Hall, ICC Commission: 7 Chair: Mr. Jaap Zevenbergen, Netherlands Rapporteur: Dr. David Mitchell, Australia

João Paulo da Fonseca Hespanha de Oliveira (Portugal), Tarun Ghawana (India), Christiaan Lemmen and Jaap Zevenbergen (Netherlands): Can LADM Contribute to a More Fair Large Scale Land Acquisition? (6442)

Jesper Paasch (Sweden), Peter van Oosterom (Netherlands), Jenny Paulsson (Sweden) and Christiaan Lemmen (Netherlands):

Specialization of the Land Administration Domain Model (LADM) – A Legal Approach (6533)

Rohan Bennett (Australia) and Jaap Zevenbergen (Netherlands): Bio-Inspired Cadastral Boundary Design (6534)

Christian Thellufsen and Jakob Højgaard-Geraae (Denmark): Business Cases in the World of Geo Data – Quantifying Qualitative Benefits (6537)

Jing Ying (China, PR), Bennett Rohan (Australia) and Zevenbergen Jaap (Netherlands): 'Up-to-date' in Land Administration: Setting the Record Straight (6549)

Robin McLaren (United Kingdom):

Engaging the Land Sector Gatekeepers in Crowdsourced Land Administration (6574)

TS04B – Planning and Development

Wednesday, 8 May 14:30–16:00 Venue: Ahmadu Bello Hall, NLH Commission: 7 and 9 Chair: Mr. **Francis Roy**, Canada Rapporteur: Mr. **Kwame Tenadu**, Nigeria

Joseph Obaje Ataguba (Nigeria): Land Management Gaps Accounting for Persistent Open-Air Trading in Rural Markets of North-Central Nigeria (6435) *This is a peer reviewed paper.*

Ibrahim Usman Jibril (Nigeria): Implementation of the Master Plan of Abuja, Nigeria, 1976 – 2012: A view from a Land Manager (6599)

Julius Olujimi and Abdullateef Bako (Nigeria):

Physical Planning Implications of Access to Residential Land and Legal Security of Tenure in Lagos Metropolis. Nigeria (6438)

Adebayo Eludoyin (United Kingdom), Lanre Ajibade, Oyenike Eludoyin, Abidemi Agboola and Olugbenga Oyeku (Nigeria): Environmental Sustainability: How relevant is spatial information system to groundwater quality assessment? (6588)

TS04C – GNSS CORS

Wednesday, 8 May 14:30–16:00 Venue: Conference Hall I, NHL Commission: 5 Chair: Dr. **Ganiyu Agbaje**, Nigeria Rapporteur: Dr. **Godstime James**, Nigeria

Pasi Häkli, Ulla Kallio and Jyrki Puupponen (Finland):

From Passive to Active Control Point Networks – Evaluation of Accuracy in Static GPS Surveying (6446) This is a peer reviewed paper.

Felix Iyiola, Rasheed Ogundele, Caleb Oluwadamilare and Olajide Kufoniyi (Nigeria): Integrity Check on Ground Control Points Using NIGNET's Continuously Operating Reference Stations (CORS) (6512)

Murat Meha, Muzafer Çaka and Reshat Murati (Kosovo): Kopos-Kosovo Positioning System (6551)

Dennis Kilian (Germany): CORS Networks Today and Tomorrow – Latest Improvements and Applications (6690)

Ioan Stoian and **Vasile Nacu** (Romania):

Measurement Methods Regarding the Quotations of a Permanent GNSS Station in Altitudinal System MN 75 (6577) This is a flash presentation.

TS04D – GIS Tools and Techniques

Wednesday, 8 May 14:30–16:00 Venue: Conference Hall III, NLH Commission: 8 Chair: Mr. **Anthony Adeoye**, Nigeria Rapporteur: Mr. **V. C. Nnam**, Nigeria

Njike Chigbu (Nigeria): Harnessing the Tourism Potentials Ofabia State Using Advanced Geospatial System Techniques – A Review (6554)

Banji Adeleye and Gbenga

Morenikeji (Nigeria): Using GIS and Remote Sensing Tools in Assessing the Development Pattern of Minna Suburban in Niger State, Nigeria. A Case Study of Gidan Kwano and Gidan Mangoro Settlements (6465)

Cheruty Shay (Nigeria):

GIS/LIS-Best Practice in Nigeria (6623)

Lekan Adeniran, Ekpo Effiong

and **Victor Ibekwe** (Nigeria): Application of Geographic Information System (GIS) in Internal Security Operations a case study of Jos north LGA (6682)

TS04E – History Session

Wednesday, 8 May 14:30–16:00 Venue: Obafemi Hall, NLH Chair: Mr. John Brock, Australia Rapporteur: Mrs. Benedicta Ugwulebo, Nigeria

John Brock (Australia): The Boundary Stones of Tutankhamun's Father – Akhenaten's City of the Sun (6562)

Peter Laarakker (Netherlands): Surveying in Nigeria 1978-1980 (6691)

Winston A. Ayeni (Nigeria): History of Training of Surveyors in Nigeria (6712)

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Venue Floor Plans

Events and Locations

NLH = Nicon Luxury Hotel **ICC** = The International Conference Centre

Registration:

- International Delegates: NLH Ground Floor
- Nigerian Delegates: NLH Lower Floor

Welcome Reception:

- NLH Pool Area

Opening Ceremony:

- ICC Africa Hall

FIG General Assembly:

- NLH Conference HallPlenary Sessions:
- ICC Africa Hall

Conference Rooms:

- NLH: Conference Hall I, Conference Hall II, Conference Hall III, Obafemi Hall and Ahmadu Bello Hall, Lagos Meeting Room
- ICC: Africa Hall,
 Executive Hall, Benue
 Hall, Niger Hall

Speakers' Preparation Room:

- NLH
- Exhibition:
- ICC Abuja Hall and NLH

FIG President:

- NLH Ebonyi
- NIS President:
- NLH Delta
- FIG Office:
- NLH Ondo
- NIS Office:
- NLH Kaduna





The International Conference Centre o



Nicon Luxury Hotel shares a fence with the International Conference Centre from the parking space. The two venues can be accessed, by walking, through a Security Gate at the fence. The alternative is to drive around the block from either of the buildings.





Wednesday, 8 May 2013 16:30-18:00

French Speaking Session -Land Administration

Wednesday, 8 May 16:30-18:00 Venue: Ahmadu Bello Hall, NLH Chair: Mr. Marc Vanderschueren, Belgium Rapporteur: Mr. Roch Abdon M. C. BAH, Benin

Francis Roy (Canada): Tenure Security and Titles Insurance: Privatization of a Public Responsibility? Sécurité foncière et assurances de titres: la privatisation d'une responsabilité publique? (6652)

Léopold Degbegnon (Benin): Reforms for Securing Land in Benin. Massive Issue of Land Titles. Réformes pour la Sécurisation foncière au Bénin. Délivrance massive de titres fonciers (6649)

Godelive Phanzu (Democratic Republic of Congo): Diagnostic urbaine et habitat. Diagnosis and Urban Habitat (6668)

Samuel Nguema Ondo Obiang (Gabon): Land Reform in Gabon: Best Practises? Quelle Reforme Fonciere au Gabon en vue de son emergence? (6684)

Jean-Francois Beaupré (Canada): The Lessons of the Creation of the Real Estate Market of the Province of Quebec (6697)

YSN: A Single-Session Version of the Workshop that was Held in Rome

Wednesday, 8 May 16:30–18:00 Venue: Benue Hall, ICC Commission: 4, 5 and 6 Chair: Ms. Kate Fairlie, Chair of FIG Young Surveyors Network Rapporteur: Ms. **Eva-Maria Unger**, Chair Elect of FIG Young Surveyors Network

Joint UN-Habitat GLTN/FIG Surveyor Generals Roundtable/Director Generals

Wednesday, 8 May 16:30-18:00 Venue: Lagos, NLH Facilitator: Prof. Rudolf Staiger, FIG Vice President Rapporteur and Summary: Jean Du Plessis, GLTN

Forum

- By invitation only

TS05A – Pro Poor Land Management and 3d and 4D Cadastre

Wednesday, 8 May 16:30–18:00 Venue: Executive Hall, ICC Commission: 7 Chair: Mr. Abdulkadir Funtua Isah, Nigeria Rapporteur: Dr. Chima Ogba, Nigeria

Douglas Black and **Lopez** Bruno (Mozambique): Pro Poor Cadastral Solutions -Bridging the Gap (6472)

Stig Enemark (Denmark): Building Fit-for-Purpose Spatial Frameworks for Sustainable Land Governance in Sub-Saharan Africa (6527)

Tarun Ghawana (India), Joao Hespanha (Portugal), Pradeep Khandelwal (India) and Peter van Oosterom (Netherlands): 3D Cadastral Complexities in Dense Urban Areas of Developing countries: Case Studies from Delhi and Satellite Towns (6429) This is a peer reviewed paper.

TS05B – Land Consolidation

Wednesday, 8 May 16:30–18:00 Venue: Ahmadu Bello Hall, NLH Commission: 7 and 9 Chair: Dr. Christiaan Lemmen. Netherlands Rapporteur: Mr. Henning Elmstrom, Denmark

Sergey Sapelnikov (Russia): SDI Components – Technology, Policy, Standards and Users (6713)

Anwuri Okwere (Nigeria): Faculty of Surveying-Panacea for Name Change Saga (6433)

Martin Hagai and Eric Mwaikambo, PhD Candidate (Tanzania): The Role of Land Information System in Instigating Spatial Enablement of Society and National SDI Development in Tanzania (6445) This is a peer reviewed paper.

Sean Johnson (Lesotho): Reforming Land Administration in Lesotho: A results report (6616)

TS05C – GNSS Positioning and Measurement I

Wednesday, 8 May 16:30-18:00 Venue: Conference Hall I, NLH Commission: 5 Chair: Mr. Gintcho Kostov, Bulgaria Rapporteur: Mr. Ivo Milev, Germanv

Li Zhang and Volker Schwieger (Germany): Investigation Regarding Different Antennas Combined with Low-Cost Receiver (6672)

Peter Nwilo, David Odegbaro, Babaiide Adegboye and Garba Ibrahim (Nigeria):

Comparison of the Processing of GNSS Data Using Fixed Ground Stations (Triangulation Stations) and the NIGNET: A Case Study of the South-South Zone of Nigeria (6624)

Gbadegesin Eluiobade (Nigeria):

CadastralUltra: A Purpose-Built Low Cost GPS System for Cadastral Surveying in Nigeria (6581)

TS05D – GIS and Remote Sensina

Wednesday, 8 May 16:30–18:00 Venue: Conference Hall III, NLH Commission: 8 Chair: Mr. Wafula Nabutola, Chair of FIG Commission 8. Kenva Rapporteur: Mr. Kwame Tenadu, Nigeria

Bola Lasisi, Chika Onwuteaka, Ramesh Chennareddy and Abimbola **Olumuviwa** (Nigeria): Production Asset Protection Using GIS and Remote Sensing Techniques – The Shell Nigeria Experience (6663)

Mary Ajayi, Babajide Ojo, Michael Olukolaio and Abiodun Oyetunji (Nigeria): Impact of Road Expansion Projects on the Informal Sector in Akure, Ondo State, Nigeria (6563)

Ekpete Benard (Nigeria): Developing Spatial Database for Sustainable Livelihood (6666)

Kurotiminipre Appah

(Nigeria): Infrastructural development using Remote Sensing and GIS (Yenagoa as a Case Study) (6514)

Wednesday 20:00-23:30

Reception for participants of UN-Habitat GLTN/FIG Roundtable, Presidents Forum and main sponsors Wednesday, 8 May 18:00-19:00 Venue: To be announced Chair: Mr. CheeHai Teo, FIG President - By invitation only

Commission Dinners Wednesday, 8 May 20:00-

23:00 Venue: To be announced

2020 (6708) Research Challenges (6439)

Gordon Johnston (United Kingdom) and Alberto Costa Neves (Monaco): Developing new Standards of Competence for Hydrographers and Cartographers for This is a flash presentation.

TS05E – Hydrographic

Education and Standards

Venue: Obafemi Hall, NLH

Chair: Mr. Akhigbe Irenen

Sutherland, Chair of FIG Com-

Itoro Udoh and Ini Eyoefen

A Career in Hydrography: The

Angela Etuonovbe (Nigeria):

The Necessity for National Hy-

drographic Service in African

Countries. Using Ghana and

Nigeria as case studies (6629)

Intricacies and its Make-Up

Rapporteur: Mr. Michael

Commission: 4

Nigeria

mission 4

(Nigeria):

(6424)

Wednesday, 8 May 16:30–18:00

Oliver Oiinnaka (Nigeria): Hydrography in Nigeria and

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Wednesday 18:00-19:00

Thursday 08:00–09:00

Thursday, 9 May 2013 09:00-10:30

FIG Commission Annual Meeting

Thursday, 9 May 08:00–09:00 Commission: FIG Commission delegates 6–10

Meetings in following rooms:

- Commission 6: Niger Hall
- Commission 7: Conference Hall III
- Commission 8: Benue Hall
 Commission 9: Ahmadu Bello Hall
- Commission 10: Obifema Hall

TS06A – Cadastral and Land

Administration Perspectives Thursday, 9 May 09:00–10:30 Venue: Executive Hall, ICC Commission: 7 Chair: Mr. Peter Laarakker, Netherlands Rapporteur: Dr. Ludmiła Pietrzak, Poland

Hasan Jamil, Mohd Yunus Mohd Yusoff and Nur Zurairah Abdul Halim (Malaysia): Discovering Possibilities of Imple-

Discovering Possibilities of Implementing Multipurpose Cadastre in Malaysia (6567)

Peter van Oosterom, Christiaan Lemmen and Harry Uitermark (Netherlands): ISO 19152:2012, Land Administration Domain Model Published by

ISO (6640) Christiaan Lemmen, Peter Van Oosterom and Harry Uitermark

(Netherlands): ISO 19152:2012, LADM Expected Impact (6645)

Mingjun Peng, Zonghua Li, Mingjun Luo and Fengkang

Geng (China, PR): Study on the Classification of Urban-and-Rural Integration Cadastral Elements (6664) *This paper will not be presented at the Working Week*

Jones Brent (USA): Cadastre 2.0 – Leveraging New Technology for Efficient, Comprehensive Cadastral Systems (6520)

TS06B – GNSS Positioning and Measurement II and Remote Sensing

Thursday, 9 May 09:00–10:30 Venue: Conference Hall I, NLH Commission: 5 Chair: Mr. **Volker Schwieger**, Germany Rapporteur: Mr. **Dirk Kowalewski**, Germany

Dirk Kowalewski (Germany): 3G+C Antenna in the Galileo Monitoring Network (6688)

Joseph Danasabe Dodo, Lazarus Ojigi, Samuel Tsebeje and Tahir Abubakar Yakubu (Nigeria): Determination of the Best-Fit Tropospheric Delay Model on the Nigerian Permanent GNSS Network (NigNet) (6525)

Onuwa Okwuashi and **Christopher Ndehedehe** (Nigeria):

Estimation of Unknown Height for Digital Terrain Model Using Support Vector Machine Regression (6614)

TS06C – Construction Economics and Management

Thursday, 9 May 09:00–10:30 Venue: Ahmadu Bello Hall, NLH Commission: 10 Chair: Mr. **Ugo Chime**, Nigeria Rapporteur: Mr. **Emmanuel Chiemelu**, Nigeria

Stanley Simon, Alfred Mulade and **Romanus Olewuike** (Nigeria): Project Management: the Nigerian Defect (6634)

Olufemi Oyedele (Nigeria): Construction Project Financing for Sustainable Development of Nigerian Cities (6398) *This is a peer reviewed paper.*

Chan K (Hong Kong SAR, China): Enhancing Sustainable Environment through Mitigating Airconditioning (6437)

David Ayock Ishaya and Daniel Dabo (Nigeria):

A Comparative Analysis of Income Producing Potentials of Leisure Properties (Empirical Evidence) Kaduna, Nigeria (6444) This is a peer reviewed paper.

Anthony Babalola (Nigeria): A study of the ethical practices of the Quantity Surveying Practitioners in Nigeria (6675)

Dorothy L. Baba, **Ikechukwu A. Diugwu** and **Musa Mohammed** (Nigeria): The Nexus of Monetary Variables

on Construction Prices (6564)

TS06D – Hydrography in Practice

Thursday, 9 May 09:00–10:30 Venue: Obafemi Hall, NLH Commission: 4 Chair: Ms. **Angela K. Etuonovbe**, Nigeria Rapporteur: Mrs. **Gertrude N. Njar**, Nigeria

Olusegun Badejo, Peter Evarie, Nkem Anorue and Sunday Alademomi (Nigeria): Tidal Harmonic Analysis at Bonga Field (6656)

Michael Sutherland and Demi

Singh (Trinidad and Tobago): Modelling Sea Level Rise in Caribbean SIDS: The Need for Tide Gauge Data (6693)

Patricia Gaspar (Netherlands), Andrew Hoggarth (Canada), Gordon Johnston (United Kingdom) and Charles de Jong (Netherlands): A Case Study in Land and Sea Data Interoperability (6710)

Bola Lasisi, Chituru Obowu and Richard Eyers (Nigeria): Niger Delta Flooding: Monitoring, Forecasting & Emergency Response Support from Shell (6659)

D. N Olayinka, **P.C. Nwilo** and **A.E. Adzandeh** (Nigeria):

From Catchment to Reach: Predictive Modelling of Floods in Nigeria (6604)

TS06E – Taxes and Valuation

Thursday, 9 May 09:00–10:30 Venue: Conference Hall II, NLH Commission: 9 Chair: Mr. **Kwame Tenadu**, Nigeria Rapporteur: Mr. **Nuhu Muhammed**, Nigeria

David Mitchell, Director,

Land Centre and **Matt Myers** (Australia): Land Valuation and Taxation: Key Tools for Disaster Risk Management (6441) *This is a peer reviewed paper.*

Ismail Ojetunde (Nigeria):

Revisiting the Interaction between the Nigerian Residential Property Market and the Macroeconomy (6466) This is a peer reviewed paper.

Long Yang, Jijin Geng, Yan Li, Xuefeng Liu and Hongwei Li (China, PR): The Mode of Tax Assessment and

Real Estate Consulting of Shenzhen City (6582)

Felician Komu (Tanzania): Housing Finance and Real Estate Markets in Tanzania (6674)

Bambang Edhi Leksono, Yuliana Susilowati, Bambang Setyadji and Munji Hartono (Indonesia): Land Value Determination to Create Land Value Zone around the Disaster Potential Area (6717)

FIG Corporate Members Meeting

Thursday, 9 May 09:00–10:30 Venue: Lagos, NLH Chair: Mr. **CheeHai Teo**, FIG President

 This annual session is for FIG Corporate Members to engage FIG Office and Council. Interested commercial entities desirous of FIG Corporate Membership are also invited to attend

Thursday 11:00–12:30

Thursday 12:30–13:00

Thursday, 9 May 2013 14:30–16:00

Plenary Session 3: Professional and Capacity Development

Thursday, 9 May 11:00–12:30 Venue: Africa Hall, ICC Chair: Ms. **Diane Dumashie**, Chair, FIG Task Force on Africa Rapporteur: Mr. **Barde Jatau**, Congress Director, FIG 2013

- Mr. Jean du Plessis, Capacity building expert (Land), Global Land Tool Network (GLTN) UN-Habitat
- Mr. Frank F. K.
 Byamugisha, Operations Adviser and Lead Land Specialist in the Africa Region of the World Bank
- Prof. Jide Kufoniyi fnis, former rector of the RECTAS (Regional Centre for Training in Aerospace Surveys), Nigeria, Member of The Nigerian Institution of Surveyors



UN-Habitat GLTN Africa LPI Capacity Development Special Event

Thursday, 9 May 12:30–13:00 Venue: Africa Hall, ICC Chair: Ms. **Diane Dumashie**, Chair, FIG Task Force on Africa

 Dr. Solomon Abebe Haile, Global Land Tool Network (GLTN), UN-Habitat, will present the proposed Africa LPI Capacity Development initiative TS07A – Land Administration, Natural Disaster and Climate Change

Thursday, 9 May 14:30–16:00 Venue: Executive Hall, ICC Commission: 7 and Chair: Dr. **David Mitchell**, Australia Rapporteur: Dr. **Chima Ogba**, Nigeria

Jamal Browne (Saint Vincent and the Grenadines): Land Tenure and Post-Disaster Economic Recovery for Caribbean SIDS: The Case of Diego Martin, Trinidad (6449)

Thomas Dabiri (Nigeria): Cadastre Spatial Information: A Dependable Tool for Flood Disaster Management in Delta State of Nigeria (6540)

Jaap Zevenbergen, Norman Kerle and Arbind Tuladhar (Netherlands): Spatial Information for Addressing and Assessing Land Issues in Disaster Risk Management (6607)

Francis Roy, Yaïves Ferland and El Mehdi Lakrikba (Canada): Land Use Planning for Reducing Natural Disaster Risks and Dam-

ages (6639)

Dimo Todorovski, Jaap Zevenbergen, Paul van der Molen and Gronendijk Liza (Netherlands): Post-Conflict Land Administration and its Current Status as Facilitator of the Post-Conflict State Building – Case Mozambique (6546)

World Bank/FIG Special Sessions on Land Administration and Reform in Sub-Saharan Africa 1 Thursday, 9 May 14:30–16:00 Venue: Niger Hall, ICC Chair: Mr. Frank Byamugisha, World Bank and Mr. Stig Enemark, FIG Discussion moderator: Mr. Christiaan Lemmen

TS07B – Land Tenure

Thursday, 9 May 14:30–16:00 Venue: Conference Hall III, NLH Commission: 9 Chair: Mr. **Abdulkadir Funtua** Isah, Nigeria Rapporteur: Mr. **Paul van der** Molen, Netherlands

Iyenemi Ibimina Kakulu, Simeon Igbara, Isaac Akuru and Nekabari Paul Visigah (Nigeria): Land Access and Community Entry Challenges in Environmental Surveys – Selected Cases from the Niger Delta Region of Nigeria (6382)

This is a peer reviewed paper.

Uchendu Chigbu and Michael Klaus (Germany):

Insecurity-Generating System of Land Tenure and its Impact on Rural Development: Evidence from Uturu, Nigeria (6375) *This is a peer reviewed paper.*

Taye Minale Belachew (Ethiopia): Housing Tenure in Ethiopia, an Empirical Study on Private Residential Tenancy in Bahir Dar City (6580)

Bernard Ochieng (Kenya): Valuing Forests for Sustainabilty: Lessons of Experience from Kenya and Proposals for Improvement (6583)

Felix lyiola and Ekpo Effiong (Nigeria):

Application of Geographic Information System (GIS) in Tenement Rates Collection (6622)

 This is a panel discussion open for all participants interested in improving land governance in Sub-Saharan Africa. The session will include short interventions from WB and FIG, followed by case studies from Rwanda and Ethiopia. The theme for the open discussion will focus on building a fit-forpurpose spatial framework in

TS07C – Geospatial Analysis Tools

Thursday, 9 May 14:30–16:00 Venue: Conference Hall II, NLH Commission: 3 Chair: Prof. **Chryssy Potsiou**, FIG Vice President, Greece Rapporteur: Mr. **Rafic Khouri**, France

Kamorudeen Aleem and Yusuf

Aina (Saudi Arabia): The use of SRTM in Assessing the Vulnerability to Predicted Sea Level Rise in Yanbu Industrial city, Saudi Arabia (6484)

Habibeh Valizadeh Alvan, Shattri Mansor, Husaini Omar (Malaysia) and Farid Haydari Azad (Iran): Surface Anomalies Prior to Earth-

quakes (6485)

Ajoke Onojeghuo and Alex

Onojeghuo (Nigeria): Mapping and Predicting Urban Sprawl Using Remote Sensing and Geographic Information System Techniques: A Case Study of Eti-Osa Local Government Area, Lagos, Nigeria (6667)

Israel Taiwo, Oyedokun Abiodun and Felix Ajibade

(Nigeria): Geographic Information Systems – A tool for Disaster Management (6669) TS07E – Engineering Surveying 1

Thursday, 9 May 14:30–16:00 Venue: Obafemi Hall, NLH Commission: 6 Chair: Mr. **Oloropo Ogundipe**, Nigeria Rapporteur: Mr. **Jacob Ehirobo**, Nigeria

Odeh Jacob Ehiorobo, Christopher O Izinyon and Okiemute Rowland Ogirigbo (Nigeria):

Measurement and Documentation for Structural Integrity Accessment of an In-service School Building at Risk (6638)

Yuhua He, Xi Zhang, Liangshu

Shi and Zhongkui Ji (China, PR): Domestic Resource Satellite-Based National Land-Use Macro Monitoring (6506)

Ivo Milev (Germany):

Infrastructure Maintenance Supported by Low Cost GNSS Applications (6651)

Maria Henriques and Sérgio

Oliveira (Portugal): Long-term Geodetic Displacements – Evaluating the Quality of Measured Displacements (6646)

Tosa Ninkov, Vladimir Bulatovic, Dejan Vasic and Zoran Susic (Serbia):

Modern Geodetic Technologies for the Canal Construction (6618)

support of sustainable and transparent land governance.

- Mr. Frank Byamugisha, World Bank
- Mr. **Stig Enemark**, FIG Case study from Rwanda
- Mr. Tigistu G. Abza, Ethiopia

Thursday, 9 May 2013 16:30-18:00

World Bank/FIG Special Sessions on Land Administration and Reform in Sub-Saharan Africa 2 Thursday, 9 May 16:30-18:00 Venue: Niger Hall, ICC Chair: Mr. Frank Byamugisha, World Bank and Mr. Tony Burns, Land Equity Discussion moderator:

Christiaan Lemmen

- This is a panel discussion open for all participants interested in improving land governance in Sub-Saharan Africa. The session will include a short presentation from Land Equity followed by case studies from Nigeria, Uganda and Tanzania. The theme for the open discussion will focus on costs, technology and capacity building for building the spatial framework.
- Mr. Tony Burns, Land Equity
- Mr. Peter Adeniyi, Nigeria
- _ Mr. Richard Oput, Uganda
- Mr. Chris Mnyanga, Tanzania

YSN: Build on the STDM Workshop that will Precede the WW

Thursday, 9 May 16:30–18:00 Venue: Benue Hall, ICC Commission: 3, 7 and 8 Chair: Ms. Kate Fairlie, Chair of FIG Young Surveyors Network Rapporteur: Ms. Eva-Maria **Unger**, Chair Elect of FIG Young Surveyors Network

TS08C – Engineering Surveying 2

Thursday, 9 May 16:30–18:00 Venue: Óbafemi Hall, NLH Commission: 6 Chair: Dr. Olusola Atilola, Nigeria Rapporteur: Dr. E. C. Moka, Nigeria

Angela Maria Barbosa de Souza, Andréa De Seixas and Luciene Ferreira Gama (Brazil): Implementation and Determina-

tion of the Three-Dimensional Geodesic Structures in the Olinda's Historical Site (6611) This is a flash presentation.

Raphael Ehigiator Irughe (Russia), Mabel Ehigiator and V.N. Uzodinma (Nigeria): Kinematic Analysis of Structural Deformation Using Kalman Filter Technique (6544)

Fabiane Bordin, Elba Calesso Teixeira, Sílvia Beatriz Alves Rolim and Francisco Manoel Wohnrath Tognoli (Brazil): Analysis of the Influence of Distance on Data Acquisition Intensity Targets Forestry Terrestrial Laser Scanner (6620) This is a flash presentation.

Thursday 16:00-19:00

NIS Annual General Meeting

Thursday, 9 May 16:00–19:00 Venue: To be announced - For all NIS members

- Open for observers

Gala Dinner

Thursday, 9 May 20:00-23:30 Venue: África Hall, ICC

Thursday 20:00-23:30

- The dinner is a three course Nigerian meal spiced with performances by musicians, comedy and dance. You have the possibility of meeting your Nigerian hosts and colleagues from abroad. One of the guest speakers will be the Minister of Works, Arc. Mike Onolememen.
- A ticket is required

Presidents Meeting

Friday, 10 May 08:30–10:30 Venue: Lagos, NLH Chair: Mr. CheeHai Teo, FIG President

Friday, 10 May 2013

- Meeting of Presidents and head of delegations of FIG member associations
- By invitation only

FIG General Assembly -**Second Session**

Friday, 10 May 11:00-12:00 Venue: Conference Hall, NLH Chair: Mr. CheeHai Teo, FIG President

- For all FIG members
- Open for observers

FIG General Assemby -Second Session – and closing

Friday, 10 May 13:00-15:00 Venue: Conference Hall, NLH Chair: Mr. CheeHai Teo, FIG President

- For all FIG members
- Open for observers

Farewell Reception

(Malaysia) Friday, 10 May 15:00–16:00 Venue: To be announced



Saturday, 11 May 09:00–17:00 Venue: Ébonvi, ŃLH Commission: FIG Council Chair: Mr. CheeHai Teo, FIG President

- By invitation only







Program at a Glance

						Tuesday 10:30–17:30	Exhibition Wednesday 9:00–17:30	Thursday 9:00–16:30			
Time Saturday 4 May		Sunday 5 May		Monday 6 May		Tuesday 7 May	Wednesday 8 May	Thursday 9 May		Friday 10 May	Time
8:00		Registration 13:00–18:00		Registration 8:00–18:00		Registration 8:00-18:00	Comm. Annual Meetings Registration 8:00–18:00	Comm. Annual Meetings Registration 8:00–18:00			8:00
9:00 10:00	Domain shop for Event)	Domain shop for Event)		Domain shop for Event)	General	Opening Ceremony	Technical Sessions and Forums F, G	Technical Sessions and Forums J		President's Meeting	9:00
	Joint UN-Habitat GLTN/FIG Social Tenure Domain Model (STDM) Training of Trainers Workshop for Young Surveying Professionals (Closed Event)	ocial Tenure ainers Works nals (Closed	бu	Joint UN-Habitat GLTN/FIG Social Tenure Domain Model (STDM) Training of Trainers Workshop for Young Surveying Professionals (Closed Event)	Assembly	Coffee break & Exhib.opens	Coffee break	Coffee break		Coffee break	
11:00 12:00						Plenary Session 1: Governance and Approaches	Plenary Session 2: Technologies and Systems	Plenary Session 3: Professional and Capaci Development	ty	General Assembly	11:00
12.00	G So f Tra sior	G So f Tra sior	eeti			Lunch	Lunch	K		Lunch	12.00
13:00	GLTN/FI aining o g Profes	GLTN/FI aining o g Profes	ACCO Meeting		General			Lunch		General Assembly	13:00
14:00	itat) Tra eyin	itat) Tra eyin		itat) Tra eyin	Assembly					and Closing	14:00
15:00	UN-Hab el (STDN ng Surv	Joint UN-Habitat GLTN/FIG Social Tenure Domain Model (STDM) Training of Trainers Workshop for Young Surveying Professionals (Closed Event)		int UN-Hab Iodel (STDN Young Surv		Technical Sessions and Forums A, B, C	Technical Sessions and Forums A, H	Technical Sessions and Forums L, M		Farewell Reception	15:00
16:00	aint Aod You					Coffee break	Coffee break	Coffee break & Exhib.closes			16:00
17:00					Welcome Reception	Technical Sessions and Forums A, D, E	Technical Sessions and Forums A, D, I	Technical Sessions and Forums M, N	NIS AGM		17:00
18:00		Council Meeting			_		Reception for participants				18:00
19:00							of GLTN/FIG Roundtable				19:00
19.00											19.00
20:00		MIS Dinner	NIS Dinner with			Nigerian Evening /	Free /				20:00
21:00	invited quests				FIG Foundation Dinner 19:30–23:00	Commission Dinners 20:00–23:00	Gala Dinner 20:00–23:30			21:00	

Technical Tours:

TT 1 – Visit to AGIS and Development Agency

- Wednesday 8 May, 14:00-18:00

A. Joint UN-Habitat GLTN/FIG Surveyor Generals Roundtable/Director Generals Forum (by invitation): 7–8 May 14:30–16:00 and 16:30–18:00 B. FIG Academic Members Forum: 7 May 14:30–16:00

C. Africa Task Force: What Future for Land Professionals in Africa: 7 May 14:30–16:00

D. French Speaking Session: 7-8 May 16:30-18:00

E. YSN (Workshop/Discussion on Crowd Sourcing) 7 May 16:30–18:00 F. Joint UN-Habitat/FIG Commission 7 Session on Participatory and Inclusive Land Readjustment (PiLAR): 8 May 9:00–10:30 G. Member Associations Forum: 8 May 9:00–10:30

H. Task Force on Property and Housing: 8 May 14:30–16:00

I. YSN (Single-Session Version of the Rome Workshop): 8 May 16:30–18:00

J. Corporate Members' Meeting: 9 May 9:00–10:30

K. UN-Habitat GLTN Africa LPI Capacity Development Special Event: 9 May 12:30–13:00

L. Task Force on Surveyors and Climate Change: 9 May 14:30–16:00 M. World Bank/FIG Special Sessions on Land Administration and Reform in Sub-Saharan Africa: 9 May 14:30–16:00 and 16:30–18:00 N. YSN (Building on the STDM Workshop Preceding the WW): 9 May 16:30–18:00

Council Meeting: 10 May 9:00-17:00

Contacts

International Federation of Surveyors (FIG)

Kalvebod Brygge 31–33 DK-1780 Copenhagen V DENMARK Tel. + 45 3886 1081 Fax + 45 3886 0252 Email: fig@fig.net www.fig.net



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Working Week web site www.fig.net/fig2013

Conference proceedings www.fig.net/pub/fig2013





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See you in Kuala Lumpur!



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