FIG-WB Partnership on Land Governance in Support of the Global Agenda

Prof. Stig Enemark, Denmark
President 2007 - 2010

Mr. Teo Chee Hai, Malaysia
President Elect 2011 - 2014

The Message

• FIG wants to continue and further develop the partnership with the World Bank as established by the MoU in February 2007.

• This relates to the global agenda such as the MDGs and the new challenges such as climate change, disaster management, urban growth, etc.

• This calls for increased global partnership on Land Governance, and FIG is prepared to invest in such collaborated efforts.

The International Federation of Surveyors
Organizational Structure

FIG Foundation
FIG Office
Annual General Assembly
100-member associations (83 countries)

Council
President and 4 Vice-Presidents

Com1 Practice
Com2 Education
Com3 Spat.Inf.Man.
Com4 Hydrography
Com5 Posit.&Map
Com6 Eng.Surveys
Com7 Cad&LandMan.
Com8 Spat.Plan.&Dev.
Com9 Valuation
Com10 Const Econom.

Chairman, vice-chairs, national delegates, work plan, working groups, seminars etc.

www.FIG.net

FIG Key Professional Areas

- Surveying and Mapping
- Spatial Information Management
- Land Administration and Land Management

President, council, and commission activities 2007-2010
The FIG Agenda

Flying High
- Global partnership with the UN-agencies incl. the World Bank in support of the global agenda such as the MDGs

Keeping the feet on the ground
- Professional and institutional development at regional, national, and local level in support of the needs of our member associations and individual surveyors.

The Role of FIG

• Professional Development
  - Global forum for professional discussions and interactions through conferences, symposia, commission working groups,
• Institutional Development
  - Capacity building through Institutional support for educational and professional and institutional development at national level
• Global Development
  - Cooperation with the UN-agencies, FAO, UN-HABITAT and World Bank, and sister organisations through Joint Board of Geospatial Information Societies.
• Information and Communication
  - Website, annual review, publications
• FIG Office
  - Administration, finances, services

FIG publications 2007–2010
available online – FIG.net

It is all about:
• People, human rights, engagement and dignity
• Politics, land policies and good governance
• Places, shelter, land rights, and natural resources
• Power, decentralisation and empowerment

FIG Policies - the big swing

• From Measurement
  Surveyors will still be high level experts within measurement science, but due to technology development the role is changing into managing the measurements

• To Management
  Surveyors will increasingly contribute to building sustainable societies as experts in managing land and properties

The Land Professionals

Current FIG policies

Do Surveyors have a role to play in the global agenda?
Yes!
Simply, no development will take place without having a spatial dimension
And no development will happen without the footprint of the surveyor
The Global Agenda

The Millennium Development Goals

Goal 1: Eradicate extreme poverty and hunger
Goal 2: Achieve universal primary education
Goal 3: Promote gender equality and empower women
Goal 4: Reduce child mortality
Goal 5: Improve maternal health
Goal 6: Combat HIV/AIDS, malaria and other diseases
Goal 7: Ensure environmental sustainability
Goal 8: Develop a Global Partnership for Development

The framework includes 18 targets and 48 indicators enabling the ongoing monitoring of annual progress.

Global Partnership with

- FAO, projects on capacity building, good governance, land economics, etc...
- UN-HABITAT, partner in the GLTN network, projects on informal settlement (STDM), informal development, gendered land tools, etc....
- World Bank, joint conference on Land Governance in support of the MDGs, joint projects and publications, etc...

Partnership with the World Bank

NoU signed May 2007
Strong partnership on Land Governance in support of the MDGs
Joint FIG-WB Conference March 2009 on Land Governance in support of the MDGs. More than 200 invited experts from throughout the world. Joint publications and declaration - a major achievement Partnership on the global agenda ahead – the contribution of Land Governance to the mega challenges of climate change, disasters, rapid urbanisation, etc.

Six Themes:
1. Land Governance for the 21st Century
2. Sustainable Systems for Land Administration and Management
3. Securing Social Tenure for the Poorest
4. Making Land Markets Work for All
5. Improving Access to Land and Shelter
6. Land Governance for Rapid Urbanisation

Taking the Land Policy Agenda Forward

Limitations of Cadastral systems – the STDM
- Closing the technical gap
- Land Governance facing the new challenges:
  - Climate Change, Disaster Risk Management, Rapid Urbanisation
  - Strengthening regional capacity
  - Africa, Asia, Latin America...
- Joint publication: "Land Information 2025"?
- Survey accuracy, fit for purpose
- Mutual participation in conferences
  - FIG working weeks, regional conferences, WB annual land conferences
- Joint FIG-WB conference/thematic workshops

Gold sponsors
Silver sponsors

Key areas for the FIG-WB partnership ahead
...Limitations of Formal Cadastral Systems

- More than 70 per cent of the land in many developing countries are outside the formal systems of land registration and administration
- This relates especially to informal settlements and areas governed by customary tenure
- Traditional cadastral systems do not provide for security of tenure in these areas.

The Social Tenure Domain Model: Closing the Gap

Modeling the relation between Parties – Spatial unit – Social Tenure

- Parties ("who"): Not only a (legal) person – but a range of subjects such as person, couple, group of people, unidentified groups, authority, etc.
- Spatial unit ("where"): Not only an identified (measured) parcel – but a range of objects such and parcels, buildings, etc. and identified in various ways – such as one point, street axes, photos, etc.
- Social tenure ("what"): Not only ownership and formal legal rights – but also a range of informal, indigenous and customary rights as well as financial issues such as group loans and micro credit.

Facing the new challenges

- Climate change
- Food shortage
- Energy scarcity
- Urban growth
- Environmental degradation
- Natural disasters
- Global financial crisis

All these challenges relate to governance and management of land

Good Land Governance is fundamental for achieving the MDGs

Climate change – disaster management

The most important environmental concern now is climate change. The authoritative Stern Report on the economics of climate change concludes that it will "affect the basic elements of life for people around the world – access to water, food production, health and the environment."

(Planning Sustainable Cities: Global Report on Human Settlement 2009 (UN-Habitat)

Food shortage – large scale agri-business

One sixth of humanity undernourished (2010)

Rapid Urbanisation

<table>
<thead>
<tr>
<th>Year</th>
<th>1950</th>
<th>1975</th>
<th>2007</th>
<th>2025</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Urban Population (million)</td>
<td>737</td>
<td>1,518</td>
<td>3,294</td>
<td>4,584</td>
<td>6,398</td>
</tr>
<tr>
<td>Percentage</td>
<td>29.1%</td>
<td>37.3%</td>
<td>49.4%</td>
<td>57.2%</td>
<td>69.6%</td>
</tr>
<tr>
<td>More Developed Region (million)</td>
<td>427</td>
<td>702</td>
<td>916</td>
<td>995</td>
<td>1,071</td>
</tr>
<tr>
<td>Less Developed Region (million)</td>
<td>310</td>
<td>817</td>
<td>2,382</td>
<td>3,590</td>
<td>5,327</td>
</tr>
</tbody>
</table>

(NH-Habitat, 2009)
Financial crisis

Survey Accuracy Requirements

<table>
<thead>
<tr>
<th>Application</th>
<th>Accuracy</th>
<th>Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geodetic Reference-Frame</td>
<td>Millimeters</td>
<td>Post-processed geodetic GNSS based on CORS</td>
</tr>
<tr>
<td>Monitoring (natural and man-made features)</td>
<td>Millimeters</td>
<td>Continuously Positioning (post-processed or real-time, including machine guidance)</td>
</tr>
<tr>
<td>Engineering and Construction (infrastructure: roads, rail, bridges, etc)</td>
<td>Millimeters</td>
<td>Continuously Positioning (post-processed or real-time, including machine guidance)</td>
</tr>
<tr>
<td>Large Scale Spatial Data Capture (non cadastral)</td>
<td>Centimeters</td>
<td>Continuously Positioning (post-processed or real-time, including machine guidance)</td>
</tr>
<tr>
<td>Mining</td>
<td>Centimeters</td>
<td>Continuously Positioning (post-processed or real-time, including machine guidance)</td>
</tr>
<tr>
<td>Precision Agriculture</td>
<td>Decimeters</td>
<td>Differential GNSS and/or Cost Effective GNSS Surveying</td>
</tr>
<tr>
<td>Urban and low value cadastre</td>
<td>Decimeters</td>
<td>Differential GNSS and/or Cost Effective GNSS Surveying</td>
</tr>
<tr>
<td>Rural and low value cadastre</td>
<td>Decimeters</td>
<td>Differential GNSS and/or Cost Effective GNSS Surveying</td>
</tr>
<tr>
<td>Asset Management and GIS</td>
<td>Decimeters</td>
<td>Differential GNSS and/or Cost Effective GNSS Surveying</td>
</tr>
<tr>
<td>Emergency Response</td>
<td>Decimeters</td>
<td>Differential GNSS and/or Cost Effective GNSS Surveying</td>
</tr>
<tr>
<td>Safety of life Navigation</td>
<td>Decimeters</td>
<td>Differential GNSS and/or Cost Effective GNSS Surveying</td>
</tr>
<tr>
<td>General Navigation</td>
<td>Meters</td>
<td>Single Point Positioning</td>
</tr>
</tbody>
</table>

FIG-WB policy statement

Accuracy Requirements:

Fit for purpose

“Land information 2025”

Collaborative projects

Preamble

Land still has potential and the capacity to provide opportunity particularly within efforts to reduce hunger, provide shelter and reduce poverty.

Proposal

The Bank and FIG can further strengthen the collaboration and partnership over the next four years and may include areas such as -

• Social Tenure Domain Model (and the complexity within the framework of Tenure Security).
• Good land governance - the role of land governance in facing the new challenges such as climate change, disasters, rapid urbanisation, poverty alleviation, etc.
• Appropriate (or fit-for-purpose) Land Administration Framework

Conference collaborations

- Bank Land Thematic Group Annual Conferences
- FIG representative may participate to present and discuss initiatives and projects.
- 2011 FIG Working Week, May 17 – 21, 2011, Marrakech, Morocco
  The Bank may participate to present and discuss initiatives and related initiatives in the region, and encourage participation from Bank-funded project staff.
- 2011 FIG Working Week, May 9 – 11, 2011, Rome, Italy
  Bank may participate with keynote and lead speakers, and encourage participation from Bank-funded project staff in the region.
- FIG Regional Conference, November 2011, South America (proposed)
  The Bank may participate to present and discuss initiatives and related initiatives in the region, and encourage participation from Bank-funded project staff.
- A Joint Bank/FIG Conference, 2012, Washington DC, United States
  The Bank may participate to present and discuss initiatives and related initiatives in the region, and encourage participation from Bank-funded project staff.
- XXV FIG Congress, May 11 – 16, 2014, Kuala Lumpur, Malaysia
  The Bank may participate to present and discuss initiatives and related initiatives in the region, and encourage participation from Bank-funded project staff.
- 2013 FIG Working Week, May, 2013, Abuja, Nigeria
  The Bank may participate to present and discuss initiatives and related initiatives in the region, and encourage participation from Bank-funded project staff.