Spatially Enabled Land Administration - Bridging the Gap

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The Message

- The Land Management paradigm is complex and highly interdisciplinary. This paper attempts to build an overall understanding.
- Good Governance and e-Governance are both key issues in this regard. Spatially enablement and knowledge management will be the key drivers.
- This calls for increased international co-operation. FIG is prepared to invest such corporate efforts.
- The UN-FIG, PC IDEA Special Forum in Aguascalientes, Mexico, July 2003 is an example of a regional approach to institutional development in land administration in Latin America.

Good Governance

The characteristics (adapted from UN-Habitat 2002):

- **Sustainability**: Balancing social, economic and environmental needs while being responsive to the present and future needs of society.
- **Subsidiarity**: Allocation of authority at the closest appropriate level consistent with efficient and cost-effective service delivery.
- **Equity**: Women and men must participate and be equally involved in all decision-making, priority setting, and resource allocation processes.
- **Efficiency**: Public services and local economic development must be financially sound and cost-effective.
- **Transparency and Accountability**: Decisions taken and their enforcement follow rules and regulations. Information must be freely available and easily accessible.
- **Civic Engagement and Citizenship**: Citizens must be empowered to participate effectively in decision-making processes.
- **Security**: All stakeholders must strive for prevention of crime and disasters. Security also implies freedom from persecution, forced evictions, and protection of land tenure security.

Good e-Governance - what is it?

- The term “Good” involves a normative debate. Different people, organisations and governments authorities will define good governance according to their own experience and interests.
- The term “Governance” involves a spatial component. All kind of government includes a spatial component.
- Good governance and sustainable development is not attainable without sound land administration or more broadly - sound land management.

The Land Management Paradigm

- **Sustainable Development**: Economic, social and environmental.
- **E-Government**: Public information and processes online.
- **E-Citizenship**: Mobilization of society to engage in planning, use and allocation of resources.
- **Land Policy Framework**: Country context

Land Information Infrastructure

E-Land Management

Land management in developed economies should facilitate sustainable development – the triple bottom line of economic, social and environmental sustainability – through public participation and informed and accountable government decision-making in relation to the built and natural environments.

- **E-Government**: Leverages government-publi information and processes on line, and using digital systems to assist public access.
- **E-Citizenship**: Mobilization of society to engage in planning, use and allocation of resources, using technology to facilitate participatory democracy.
- **E-Governance**: e-Democracy – helping to govern society through the use of the web.
Land Administration Systems

Land Administration Systems are concerned with the four land administration functions of land tenure, land value, land-use and land development. Spatial enablement offers land administration a revolution equivalent to the conversion of paper files to digital systems of twenty years ago.

Spatial Enablement

Spatial enablement is just one form of interoperability – the capacity for a computer to identify “where” something is. It is, however, far more energetic and offers opportunities for visualisation, scalability, and user functionalities. The benefits of spatial enablement of the core cadastral layer is:

- Attachment of information to images of the parcel and property
- Identification of “the place” in ways that are understandable by non-technical people
- Capacity of businesses and citizens to manipulate the information
- Inclusion of various layers of geo-referenced information
- Integration of government information systems and provision of seamless information to institutions and government
- Ultimately managing information through spatially enabled systems, rather than databases.
- Sharing of the core spatial information layer

Knowledge Management in e-Government

Knowledge management is about optimising the use of the basic asset of any organisation namely knowledge. Knowledge management is an integrated approach to managing the information assets of an organisation/enterprise. Knowledge management is, in fact, just common sense.

- Knowledge Management in e-Government

It is about organizing and sharing of data. It is about designing and implementing a suitable IT-architecture for organizing spatial information that can improve the communication between administrative systems and also establish more reliable data due to the use of the original data instead of copies.

The role of FIG

What is the role of FIG in this regard?
Organizational Structure

- Annual General Assembly: 101 member associations (85 countries)
- Council: President and 4 Vice-Presidents
- FIG Office: Director, Office Manager, Assistant
- Com1: Practice
- Com2: Education
- Com3: Spat. Inf. Man.
- Com4: Hydrography
- Com5: Posit. & Map
- Com6: Eng. Surveys
- Com7: Cad & Land Man.
- Com8: Spat. Plan. & Dev.
- Com9: Valuation
- Com10: Quantity Surv.

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

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The Role of FIG

- Professional Development:
  - Global forum for professional discussions and interactions
  - Conferences, symposia, commission working groups, etc.
- Institutional Development:
  - Institutional support for educational and professional development at national and international level
- Global Development:
  - Cooperation with international NGO’s such as the UN agencies, World Bank, and sister organisations
  - Joint activities and common policy-making to reduce poverty and enforce sustainable development

FIG publications

WWW.FIG.NET

A Regional Case Study of Latin America

- 7th UNRCC-A: January 2001 resolution
- And a resolution from 16th UNRCC-AP, July 2003
- UN, FIG & PC IDEA Special Forum – hosted by Mexico
- FIG Lead Role
- Funding: Natural Resources Canada, USAID, USGS/FGDC, World Bank, Danish Trust Fund, PAIGH
- 60 invited delegates from 18 countries plus representatives from UN, PC IDEA, WB, PAIGH, FIG
- Key notes, country case studies, discussions

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The Aguascalientes Statement
Aguascalientes Statement

- Foster modern land policies and associated SDI's - to better support social, economic and environmental sustainability
- Determine policies and programs for educational and institutional capacity building - to ensure the development of appropriate land administration systems and associated spatial data infrastructures
- Develop appropriate institutional, legal and technical processes - to integrate land administration, cadastre and land registration functions with topographic mapping programs within the context of a wider national strategy for SDI

Focus on Land Management

- Develop a wider vision
- Formulate national policies
- Demonstrate economic value of LAS & SDI
- Encourage visionary leadership
- Focus on user needs
- Facilitate capacity development of human resources
- Integrate land administration, cadastre and land registration functions with topographic mapping and SDI

The Challenges

- Educational
  - Measurement Science, GIS and Land Management
  - Lack of experts in Land Administration
  - Need to developing a broader educational profile to include
- Professional
  - Need for establishing professional associations, business standards, etc.
- Institutional
  - Need for establishing institutional arrangement to support implementation of land policies
- Capacity Building
  - Need for sustaining educational facilities in terms of institutional development, quality management and financial support; Need to establish regional centers of expertise.

Aguascalientes Statement

Key Findings & Recommendations

- Develop a wider vision
- Formulate national policies
- Demonstrate economic value of LAS & SDI
- Encourage visionary leadership
- Focus on user needs
- Facilitate capacity development of human resources
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Thank you for your attention