Spatially Enabled Government
- A Global Land Management Perspective

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Spatially enabled government is achieved when governments use place as the key means of organising their activities in addition to information, and when location and spatial information are available to citizens and businesses to encourage creativity.

Centre for Spatial Data Infrastructure and Land Administration
Department of Geomatics, University of Melbourne, 2006.

Who understands place?

Less than 1% of people are specialists
Less than 5% understand the technology
95% do not understand the technology
Merging Land Information

Consider: Google Earth merging with built and natural environment data. This unleashes the power of both technologies …

emergency response, taxation assessment, environmental monitoring and conservation, economic planning and assessment, social services planning, infrastructure planning, etc, etc

Good Governance

- **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 services.
- **Equity**: Women and men must participate as equals 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 follows rules and regulations. Information must be freely available and directly 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 provision of land tenure security.

Adapted from UN-Habitat 2002

The Land Management Paradigm

Land management should facilitate sustainable development through informed and accountable government decision making in relation to the built and natural environments.

All kind of government includes a spatial component
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

It is about designing and implementing a suitable IT-architecture for organising 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. Spatial enablement offers opportunities for visualisation, scalability, and user functionalities.

- Attachment of information to images of the parcel and property
- Identification of “the place” in ways that are understandable by non-technical people (Google Earth)
- Capacity of businesses and citizens to manipulate the information through service-oriented IT-architecture.
- Integration of government information systems
- Provision of seamless information to institutions and government
- Ultimately managing information through spatially enabled systems rather than databases.

Institutional Challenges

- There are a range of stakeholder interests
  This includes Ministries/Departments such as: Justice, Taxation, Planning, Environment, Transport; Agriculture, Housing; Interior (regional and local authorities); Utilities; and civil society interests such as businesses and citizens.
- Creating awareness of the benefits of developing a shared platform for Integrated Land Information Management takes time and patience.
- Mapping/Cadastral Agencies have a key role to play.

Western Australia: Integrated Land Information Management
Spatially Enabled Government

A spatially enabled government organises its business and processes around “place” based technologies, as distinct from using maps, visuals, and web-enablement.

The technical core of Spatially Enabling Government is the spatially enabled cadastre.

The role of FIG

What is the role of FIG in this regard?

The Role of FIG

- **Professional Development**
  - Global forum for professional discussions and interactions
  - Conferences, symposia, commission working groups, …

- **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

101 FIG Member Associations from 85 Countries

- 20 affiliates, 15 corresponding, 85 academic, 35 corporate members

FIG publications

WWW.FIG.NET
From Cadastre to Holistic and Pro Poor Land Management

- Holding of rights to lands
- Economic aspects of land
- Control of land use and land development

Administering the people to land relationship through
- Land Policy
- Land Management
- Good Governance

and
- Building the capacity to deal with this

The role of FIG

Is also strongly committed to the MDGs and the UN-Habitat agenda on the GLTN

The UN 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.

The role of the surveying profession

The MDGs is a powerful concept towards development, security and human rights for all. The surveying profession plays a key role by providing:

- Geographic information in terms of mapping and databases on the natural and built environment
- Secure tenure systems
- Systems for land valuation, land use management and land development
- Systems for transparency and good governance

Northern Ghana
Kibera, Nairobi, 250 ha, 1 mill+ people

Cooperation Agreement with UN-Habitat

Traditional cadastral systems do not provide for security of tenure in informal settlements.

A more flexible system is needed for identifying the various kind of social tenure existing in informal settlements.

Such systems must be based on a global standard and must manageable by the local community itself.

The Social Tenure Domain Model

Cooperation Agreement with the World Bank

- Mutual representation at conferences, forums and meetings
- Mutual representation in collaborative projects
- Joint publications
- Joint promotion
- Organizing a joint WB/FIG high profile conference late 2008 at the WB headquarters in Washington DC entitled "Land Administration in Support of the MDG’s"

It is all about:

- **People**
  - Human rights, engagement and dignity
- **Politics**
  - Land policies and good governance
- **Places**
  - Shelter, land rights and natural resources
The future belongs to our children