Potential for Public-Private Partnership (PPP) for SDI in Malaysia

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Introduction: Malaysian NSDI - MyGDI

Existing Policy for PPP in Malaysia

Public-Private Partnership (PPP) for SDI

Conclusion
Malaysian Geospatial Data Infrastructure (MyGDI)

Managed by Malaysian Centre for Geospatial Data Infrastructure (MaCGDI), Ministry of Natural Resources and Environment
Current Status

- To increase the effectiveness of MyGDI
  - Widening the services to materialize the potential and to address the demands by potential users
  - Adoption of the enabling technology
  - Extend ways of engaging agencies through awareness program

- Improving the coordination among agencies
  - Encourage the usage of standards
  - Strengthening Legal ground rules and arrangements

- To widen the range of services
  - Focus on the integration of spatial data and analysis in the mission-critical business processes on increasing the return on investment (ROI)
  - Focus on using GIS technology to improve decision making and service delivery

- To strike a balance between data sharing and focused applications
  - To package the services to utilize data that are made available through the system
  - Develop focused applications
Towards Spatially Enabled Malaysian: The Road Map

**SPATIALLY ENABLED TECHNOLOGY**
- GPS/GNSS
- Total Station
- Ground/Airborne Laser Scanning Technology
- Ocean Mapping Systems
- Satellite Images
- Airborne Sensors (Radar/Gravity/Magnetic)
- Spaceborne Sensors (Radar/Altimetry/Etc)

**SPATIALLY ENABLED PLATFORM**
- National Geospatial Data Centre (NGDC)
- State Geospatial Data Centre (SGDC)
- Local Geospatial Data Centre (LGDC)
- National Digital Cadastral Database (NDCDB)
- Multi Purpose Cadastre Utility Database
- Marine Geospatial Data Centre (MGDC)

**SPATIALLY ENABLED SYSTEM**
- MyGDI Geodata Services
- Utility Information System
- Land Administration System (eLand)
- Coastal & Marine GIS Geoinformation for NRE
- Planning Information System
- GIS System For Local Authorities
- Environmental Management System
- Defense GIS System

**SPATIALLY ENABLED GOVERNMENT**
- Economic Development
  - Land Administration
  - Public Works
  - Urban & Regional Planning
- Real Estate And Facilities Management
- National Security
- Public Safety
- Tourism
- Integrated Coastal Zone Management (ICZM)
- Sustainable Development

**NATIONAL GEOSPATIAL REFERENCE FRAME**
- (GDM2000, MyRTKnet, NDCDB, Marine Geodetic Control)
Existing Policy for PPP in Malaysia

PPP involves transfer to the private sector the responsibility to fund and manage a capital investment package and services including the construction, management, maintenance, improvement and replacement of public sector assets such as buildings, infrastructure, equipment and other facilities that create a stand alone business.
Existing Policy for PPP in Malaysia (cont.)

- For PPP projects, the private sector involved will be bound by a contract and is required to provide long-term services, which are public infrastructure-based.

- The private sector will have to generate its own funds to finance the whole or part of the assets and have to provide services based on an agreed level of performance.

- The government, or in some cases the public, will make payments to the private sector for the services.
Data users expect NSDI to provide them readily available data without the necessary step of requesting the data from data providers as well as the step for them to process and prepare the data for their use.
Issues about data are common in GIS and these ranged anywhere from data availability to its quality.

In the case of Malaysian NSDI, issues are related to data sharing, data availability and data updating.
Business-like Approach through PPP

- Business characteristics to bring out in NSDI include focus on customers’ value and service delivery.

- A layer of business-like approach in NSDI will complement the current institutional set up by translating implementation of standards into valuable services and turning data into data usage.

- Partnership between government entity and business enterprise is important to realize the potential of NSDI with user-oriented services as the focus.
A service-driven/customer-focused solution should incorporate the established NSDI and extends the functionality beyond data-centric services.

Employing NSDI as the facilitating backbone, the solution accommodates multi-user employing various platform to access the services.
Filling in the Gaps in Data Availability

• Willingness to share data will continue to impede the progress in data sharing. This could be due to the perception that data is an end product in itself.

• Some agencies are not willing to extend the services to make their data to be readily shareable because it is beyond their conventionally established tasks.

• Collaborative arrangement with private organization can fill in the gap to make the data from the various sources to be readily available besides taking the responsibility to update them accordingly as needed in service-driven/customer-focused solution.
Other than professionals who have competence in GIS, the targeted users in PPP include general users whose interest may place GIS and spatial issues as the background and put their business needs at the forefront, thus regards GIS and spatial issues to be secondary.
Role of Government and Private Sectors in PPP

- Government will continue to spearhead the development of MyGDI and other matters that are closely related to NSDI. The private sector will undertake the effort to deal with data issues that otherwise would be left unresolved.

- The government-private sectors collaboration is important in this solution where without the success of NSDI, the services in this customer-focused solution will not be fully materialized.
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Role of Government and Private Sectors in PPP (cont.)

A government-private sectors collaboration to enhance the implementation of NSDI thus establishing customer-focused solution will also provide the foundation for content development and mobile computing.

Collaboration towards customer-focused solution will emphasize on data usage and content development utilizing the data with user needs as the driving factor.

Effectively, the establishment of the solution as identified will support the government’s effort to promote digital content and the recognition of the importance of mobile computing.
The government would invest in an engagement with a private sector where the private sector will provide data and services to an identified group of agencies in the public sector for an agreed period.

During the contract period, the private sector additionally will carry out periodic data updating thus the agencies will always have updated data.
Economic/Cost Sharing Model (cont.)

- The private sector will further market the data to users both in the public and private sectors as well as the public at large.

- The private sector and the government can have a profit-sharing arrangement therefore the operation of NSDI by the government will have funds to maintain while the business operation of the private sector to continue servicing the contract can be sustained.
The responsibilities should be clearly defined where

- The public sector is responsible for standards, policy and legislation;
- The public/private sector cooperatively designs and develop the infrastructure;
- The public and private sectors work cooperatively to market the services and technologies developed under NSDI initiatives.
- Wider coverage in NSDI focusing on services for the users from public and private sectors.
THANK YOU