## The Strategic Role of NMA's in SDI Development and Implementation

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There are many opportunities for national mapping agencies (NMA's) at this moment in providing services to our community. I am using the term NMA in a broad sense. Cadastral Agencies and Land Administration Agencies are also included in this term in this paper.

At the current time NMA's and Cadastres are running registrations in the public domain, which are the backbone to society. This includes legal security, taxation and economic development. NMA's work with the most advanced technological business processes in the public domain to create effective and efficient government and optimized service provision to their national society. National mapping agencies play a key role in the execution of e government policy plans and provide interactive tools to citizens.

Opportunities for NMA's in national and international perspectives are rapidly growing. The role is in evolution nowadays. NMA's are more and more responsible for the creation, coordination and implementation of their Spatial Data Infrastructures on national and international levels.

They are lobbying and arranging the composition of a national SDI legal framework, and they arrange cooperation mechanisms and provide platforms in the public domain for composing standards, portals, as well as legal and institutional arrangements. NMA's are in the position to arrange, compose and organize their national SDI. Institutional arrangements for the creation of this SDI need to be made. This includes the regulation of leadership, the way in which coordination and cooperation will be realized and a committed communication strategy with all the main stakeholders..

One of the key elements for the strategic role of NMA's in SDI development / implementation is the fact that land administration and NMA's provide well maintained and up to date data and services which are of eminent importance for the economic development of nations, and are catalysts for the development of SDI's. They stimulate the exchange of core data with other organizations in the public domain, data sharing and data integration. These activities can only take place when they arrange in interaction with the government organisational and institutional arrangements to realize these ambitions. The NMA's are playing a stimulating role that these arrangements will be included in the national e- government plans. These activities will lead to spatial enabled governments and the creation of an enabled geospatial society, by arranging partnerships with the geo spatial technology sector.

They need to keep an open eye on the quick changes in the geo spatial technology community, and opportunity in this sector to cooperate with this sector to optimize the information supply to our societies.

Spatial technology will become more and more a standard tool in the future to help governments perform effectively.

Encouraging the private sector in development, innovation and competitive value addition, and providing clear terms and conditions for licence, development of maps, adding data, and royalty for providing data to the SDI could be given priority. Data producers and the geo spatial industry as a whole are becoming an essential part of the IT industry and its business processes as a crucial partner for user information and consumer based value added products. National Mapping Agencies will play in this process a facilitating and matchmaking role in making spatial data information infrastructures a crucial tool for e-government policies and decisions making.

Producers of spatial technologies are playing a major role in the production of route planning systems, intelligent mobile phones and other intelligent internet facilities for the consumer market. The impact is that the producers of geo information and geo spatial technologies are moving more and more in the direction of hard IT sector and they will become even more important partner for companies such as Microsoft and Google.

As the use of geo spatial technology in national security increases its impact will reflect in the security and safety regulations for the benefit of our national and international societies.

Another growth market is the linkage, relationship and exchange of voluntary collected data in communities with professional organisations. It stimulates cooperation on a local level, brings in social coherence in the society and gives legitimacy for governments to act.

The above mentioned examples illustrate the strengths of the geo spatial technology sector which are attractive tools for potential partnerships building in optimizing the benefit of the use of spatial data infrastructure for the our societies. This approach requires the SDI's contain well maintained, up to date and high quality core public data

In my presentation I will go through some successful examples in Europe that illustrate the strategic role that NMAs play in the development and implementation of SDI's from Finland, Sweden, Denmark, the Netherlands, Estonia and Spain. These examples illustrate how their NMA's play a crucial role in their national and international SDI policies, e government and other decision making processes.

That means that they are the leading agency in the national GI policy development, commitment building and decision making process.

Many NMA's throughout the globe and especially in the Asia Pacific region are starting with similar initiatives.

The GSDI Association works closely together with organizations in the Asia Pacific Region in providing NMA's with essential tools for including spatial enabled government arrangements in their SDI programs. In that way the NMA's are playing an important key role in e government business processes.

In conjunction with the UN Permanent Committee for GI in the Asia Pacific, the GSDI Association organized several workshops on the Spatial Enablement of Government approach. Let's explain what SEG means. A society or a government can be regarded as spatially enabled when location and spatial information and technologies are regarded as common goods made available to citizens and businesses to encourage creativity and product development .Spatial enablement uses the concept of place and location to organize information as an ubiquitous part of e Government and broader government ICT strategies.

During a workshop in Seoul South Korea, we had 200 representatives participate from 50 countries in the Asia Pacific Region.

A lot of progress has been made in the meantime. In Australia, Spatial Enabled Government is an essential SDI element within their e government programs. The Australian former Minister of State responsible for this process will give a keynote speech at our GSDI 11 conference. Other countries have also made tremendous progress such as South Korea, Malaysia and Singapore.

This month (May 2009) we will launch this issue in the Middle East in close cooperation with PCGIAP, FIG and ICA.

One of the leaders in this process is the Singapore Land Authority. This agency fulfils a strategic role in the Singapore e government activities. They play a coordinating role in the development of the SDI and they are subsequently in a position to play a leading role in e government development.

At the GSDI 12 conference in Singapore in October 2010 spatial enablement of governments will be a major theme.

There is an increasing need in our geo spatial community across the globe to share knowledge and information on how successfully implemented spatial data infrastructures can increasingly respond to societal needs using the broad range of technological opportunities.

The GSDI Association is a lobbying and a bridge building organization among nations. GSDI fulfils this role thanks to the successes that the GSDI members have made around the world in the field of SDIs. The NMA's can act as an initiating and matchmaking partner in SDI development in such a way that it leads to optimized performances of governments and innovations.

There are many differences around the globe on how SDI's are used and the way in which NMA's are involved. GSDI provides a strategic forum for NMA's to discuss these differences and their strategic role, in today's rapidly changing social and economic environment.

## CONTACTS

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