



Speech by

*His Excellency Dato Sri Douglas Uggah Embas*

Minister of Natural Resources and Environment, Malaysia

THEME: GLOBAL GEOSPATIAL INFORMATION MANAGEMENT

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*Thank you very much Ms Chairperson, Dr. Vanessa!*

***His Excellency Honourable Minister KWON Do Youp,  
Minister for Land, Transport and Maritime Affairs, Republic of  
Korea,***

***Her Excellency Ms Catalina Parot, Minister of National Property,  
Chile;***

***His Excellency Mr Jari Koskinen, Minister of Agriculture and  
Forestry, Finland;***

***His Excellency Mr Vilas Rao Deshmukh, Minister for Science and  
Technology, India***

***His Excellency Mr A. Gansukh, Minister of Road, Transportation,  
Construction and Urban Development, Mongolia***

***His Excellency Mr Alpheus G. !Naruseb, Minister of Lands and  
Resettlement, Namibia***

***Your Excellencies, Ladies and Gentlemen!***

**Good Morning,**

1. I am indeed honoured to have the privilege to deliver a speech at this important gathering. I must thank the organizing committee and the United Nations for giving me this opportunity to share our views and aspirations on Geospatial Information Management activities in Malaysia. Your presence here today at this auspicious occasion clearly demonstrates that geospatial technology is increasingly becoming an important discipline globally.

***Honourable Ministers, Ladies and Gentlemen!***

2. We live in a world in which knowledge flows are growing rapidly and in an increasingly dis-intermediated form. These developments brought about by the widespread and increasing use of geospatial technologies such as GIS, Remote Sensing, Photogrammetry and GPS are impacting societies throughout the world in a significant way. In this regard, geospatial information technology such as the GIS will continue to provide the platform and capability to integrate spatial and non-spatial information and model in multi-sensor and multi-source database. Apart from this, three dimensional geospatial information has been the subject of growing interest within the geospatial community and other related professionals. Currently, efforts in 3-D Geospatial Information are focused towards operationalising systems that will be able to provide 3-D geospatial information solutions for users and the public as a whole.

3. Indeed, this is a very exciting time for geospatial technologies. Users and researchers around the world are changing their perception on how to leverage their knowledge which could lead to more willingness to share data. Geospatial technologies are being used as revolutionary tools, using it to integrate with the best technologies as well as to make informed decisions. Nonetheless, we have to bear in mind that technologies are only tools to be applied by us, and it is we who solve problems. In order for us to solve problems, we require accurate geospatial information, which obviously is one of the most important components of the technology involved. The incorporation of accurate geospatial information and technologies in operations can empower seamless innovative geospatial solutions.

4. Thus, it is now becoming increasingly clear that GIS is fast emerging as an effective tool to resolve issues faced by societies around the world. This technology has become an important tool in many sectors and industries including environment, oil and gas, utilities, disaster management, asset management as well as urban and regional mapping. It has assumed an important role in addressing issues in land and natural resources management, infrastructure development, rural development and defence. GIS has also contributed significantly to overcome bigger challenges that the world is facing today, such as environmental conservation, climate change and global warming. Thus, it is important that we intensify our efforts to promote geospatial information management as well as

enhance greater awareness amongst policy makers and decision makers on the use and benefits of this discipline.

***Honourable Ministers, Ladies and Gentlemen!***

5. I am delighted to share with you that Malaysia has endorsed developing the concept of “**Spatially Enabled Government and Society**”. There are many Government agencies such as the Department of Survey & Mapping, Department of Agriculture, Malaysian Remote Sensing Agency, Public Works Department, Economic Planning Unit, Valuation and Property Services Department and many others that have been using Geospatial Information technology in their operations for quite sometime.

6. The Department of Survey and Mapping Malaysia or JUPEM, which is a department under my Ministry, is one of the main providers of geospatial data in Malaysia. JUPEM provides the core or fundamental datasets especially the cadastral survey and topographic datasets to many users including GIS users.

7. In regards to this matter, I am proud to say that JUPEM has drastically transformed their work processes. They have implemented technology-oriented solutions, for example, the eKadaster – to expedite the delivery systems for land titling. This system has enabled us to reduce the time taken to complete land survey operations by more than 80%. Other benefits of the eKadaster include replacing the previous digital cadastral database with a

seamless and homogeneous one and producing GIS ready cadastral survey information. Under the 10<sup>th</sup> Malaysia Plan, we will further enhance the accuracy of the new digital cadastral database to meet the growing needs of our data users. Works on this project have already started in July 2011.

8. In line with technological advancements, JUPEM has also radically transformed its mapping work flow line by adopting digital mapping processes and subsequently automating and accelerating topographic mapping processes through the implementation of the so-called Computer Assisted Topographic Mapping System. This endeavor has result in productivity increase by more than 150%. Under the 10<sup>th</sup> Malaysia Plan, we will continue to accelerate our topographic data production and this will be undertaken under the recently approved e-Mapping project. This project aims, among other things, to further expedite topographic data collection, production and data updating. I believe the outcome of this project will certainly benefit the GIS community.

9. Another agency under my Ministry is the Malaysian Centre for Geospatial Data Infrastructure (MaCGDI) which was established as the nodal agency to drive the use of geospatial information in the country through Malaysian Geospatial Data Infrastructure (MyGDI). The main functions of MaCGDI include coordinating access and delivery of the geospatial information throughout all agencies and building networks of people and technology. The purpose is to facilitate, coordinate and manage geospatial data infrastructure

through the development of policies, standards, geodata, technology and R&D as well as undertake capacity building programs.

10. MyGDI as the National Spatial Data Infrastructure (NSDI) for Malaysia aims to develop partnerships among agencies to produce and share geospatial information to provide customer-focused, cost effective and timely delivery of geospatial data. Through its application MyGDI Explorer, MyGDI facilitates online access to geospatial information to avoid duplication of effort, especially in the collection of geospatial data.

11. The Land and Survey Information System (LASIS) which has been implemented in Sarawak (one of the states in Malaysia) also deserves mention. The system allows online payment of land rent and premium and also enables landowners to view the rent record prior to the payment. It provides instant registration of land instruments with automated e-mail notification. LASIS provides title search facility to the public for them to search land titles at any land and survey divisional offices at a nominal fee. Online submission and approval of land applications between the department headquarters and the divisional offices can be done without involving physical documents. The system also allows digital submission of survey jobs carried out by private surveyors. The fully integrated datasets permit the information to be made available on demand to facilitate intelligent analysis and reliable decision-making.

12. Apart from that, the Department of Mineral and Geoscience is currently building an enterprise level – Mineral and Geoscience Information System (MINGEOSIS). MINGEOSIS is an integrated, centralised and Web-based spatial database with both textural and spatial aspects. The project was initiated in 2006 and completed in 2010 under the Master Plan 2010. It has eight (8) database and GIS applications namely, Hydrogeological, Industrial Minerals, Metallic Minerals, Coal Exploration, Engineering Geology, Geochemical Exploration, Mining and Quarry and Engineering Geology. The project has been completed end of 2010. At present MINGEOSIS is still under rolling-out programme to provide services to relevant agencies and as well to the public.

13. Another important development in the geospatial domain is the procurement of Mobile GIS by the Implementation and Coordination Unit (or ICU) of the Prime Minister's Department. ICU needs to integrate the resources and strategies from distinct institutes and find the best solution to support projects in various domains, such as agriculture, tourism, and rural development.

14. These initiatives are but just a few that have been implemented to show the proliferation of Geospatial Information technology, particularly in the government sector. This development have been closely followed by many in the private sector, leveraging on the provision of geospatial information to enhance and conduct their businesses more efficiently.

***Honourable Ministers, Ladies and Gentlemen!***

15. Malaysia has witnessed rapid growth in recent times. These rapid development activities are fuelling high demand for geospatial information. Data quality, lack of large scale information, data currency and lack of coordinated geospatial activities as well as capacity building are among the main issues and challenges faced by Malaysia. Despite these challenges, Malaysia has made quite significant progress towards achieving the vision of a Spatially Enabled Government and Society. Some significant and notable improvements have been made in areas such as data sharing among government agencies, the development of seamless fundamental datasets, usage of standards for geospatial data as well as increase in demand and the number of agencies using geospatial information.

16. Capacity building is also important and currently is still an issue that needs to be addressed. Currently, a number of capacity building efforts are being undertaken by relevant institutions including universities. These include providing formal education programs in GIS at both the undergraduate and postgraduate levels. Capacity building efforts are also being carried out through conferences, workshops, seminars, short courses and summer school programs by professional bodies, universities, societies and government agencies.

***Honourable Ministers, Ladies and Gentlemen!***

17. With good strategies and action plans, Malaysia is now in a position to explore the opportunities that will help Malaysia become a Spatially Enabled country. The Malaysian government's initiative to develop the National Geospatial Data Centre (NGDC) is one of the positive steps toward realising the vision of a Spatially Enabled Government. Other initiatives include enhancing the Data Centre in terms of upgrading the spatial accuracy and completeness of the datasets available in the centre.

18. The Department of Survey and Mapping Malaysia and Malaysia Centre for Geospatial Data Infrastructure have formulated strategies to ensure better coordination and effective use of geospatial data. Towards this, we are working on a distinctive policy and legal framework to improve geospatial data management in the country. In this regard, the National Geospatial Act is being formulated to improve governance and control of geospatial activities undertaken by government agencies and the private sector in the country. The proposed Act will provide the legal framework for the development of a spatially enabled government and society.

***Honourable Ministers, Ladies and Gentlemen!***

19. Despite being one of the late beginners in the field of geospatial sciences, I see that the implementation of Geospatial Data Infrastructure (GDI) in Malaysia is pretty much in balance and in tandem with the other developed countries. In terms of activities and

implementation programs, I could say that we are on the right track and approaching close to our achieving our goals of becoming a Spatially Enabled Government and Spatially Enabled Society.

20. I sincerely hope that this Ministerial Segment will provide an avenue for fruitful discussions and I once again thank the organizing committee and the United Nations for the opportunity to participate in this segment.

Thank you.