

MALAYSIA'S COUNTRY REPORT

FOR THE 13TH SESSION OF

THE UN COMMITTEE OF EXPERTS ON

GLOBAL GEOSPATIAL INFORMATION MANAGEMENT (UN-GGIM)

REPORT ON STATUS OF THE INFORMATION MANAGEMENT AND NATIONAL GEOSPATIAL ACTIVITIES

1.0 Introduction of UNGGIM

UNGGIM (United Nations - Global Geospatial Information Management) is an international committee established to foster leadership in ensuring geospatial information and resources are coordinated, maintained, accessible and can be used by member countries and communities in finding sustainable solutions for social, economic and environment. The committee provides a forum for coordination and dialogue among member states and relevant international organizations regarding cooperation in the field of global geospatial information management. The terms of reference approved by ECOSOC (Economic and Social Council) encouraged the member states to appoint experts with specific knowledge of geospatial information management and many fields related to geospatial such as geomatics, surveying, geography, land administration, geodesy, cartography and mapping, remote sensing, hydrography and oceanography, land/sea and geographic information systems and environmental sciences. UNGGIM has been divided into several regions namely Asia-Pacific (AP), America, Arab Countries, Europe and Africa

2.0 Malaysia's Involvement In UNGGIM

Malaysia is a member country under UNGGIM-AP. Based on the decision of the Council of Ministers in its meeting on 22 March 1995 while considering Paper No. 197/1965/95 has agreed that Survey and Mapping Department of Malaysia (JUPEM) has represent Malaysia to be involved in the Permanent Committee on Geographic Information System Infrastructure for Asia and the Pacific (PCGIAP). PCGIAP was established during the 13th United Nations Regional Cartographic Conference for Asia and the Pacific (UNRCC-AP) which was held in Beijing in 1994. During the 19th UNRCC-AP Resolution which was held in November 2012 in Bangkok, PCGIAP was known as UNGGIM-AP (United Nations Global Geospatial Information Management-Asia Pacific) in accordance with its wider role at the regional and global level. This organization is made up of 64 countries from the Asia Pacific region and operates under the auspices of the United Nations (UN). The Director General of Surveying and Mapping Malaysia is a member of the Executive Board.

Meanwhile, the National Geospatial Center (PGN), Ministry of Natural Resources, Environment and Climate Change (NRECC) is a government agency responsible for coordinating geospatial activities for all government agencies to facilitate the use of geospatial data in the government sector. PGN, NRECC is the coordinator for the MyGDI (Malaysian Geospatial Data Infrastructure) program and has developed a geospatial information sharing platform to support and facilitate the decision-making and planning process by management according to relevant sectors

3.0 The Development and Sharing of Geospatial Data Activities

3.1 MyGDI (*Malaysian Geospatial Data Infrastructure*)

Malaysia Geospatial Data Infrastructure (MyGDI) is an initiative by the government to develop a geospatial sharing data infrastructure to enhance the awareness about data availability and improve access to geospatial information. This can be fulfilled by facilitating data sharing among participating agencies. MyGDI can also encourage the wider use of geospatial information at all levels as well as increase awareness towards strengthening the development of the country's geospatial information.

3.2 Geospatial Data Categories

There are 12 categories of geospatial data that comply with Malaysia Standard (MS) 1759 - Geographic Information/ Geomatics - Features

and Attribute Codes which include airspace, surface, underground and maritime data. The 12 data categories are as follows:

- i. Aeronautical- airport data
- ii. *Built Environment-* business buildings, houses of worship, educational institutions.
- iii. Demarcation- land administration boundaries
- iv. *Geology* all geological and geoscience mapping information related to geospatial data including minerals, fossils, mining.
- v. *Hydrography* beaches, shoreline structures, fishing facilities, piers and ports, navigational aids.
- vi. Soil soil classifications
- vii. *Transportation-* geospatial information that includes water and land transport such as road networks, railway networks, waterways and port terminals.
- viii. *Utility* related to electricity, telecommunications, water supply, oil and gas, broadcasting, drainage, and waste management.
- ix. *Vegetation* geospatial data on agricultural activities, boundaries and plant areas such as forests, mangroves, dry land, wetlands, and plantations.
- x. Special Use surface dataset analysis, meteorological datasets such as temperature and rainfall distribution and geoid surface.
- xi. *General* control point monuments such as geodetic control stations, tide stations, land control points.

3.3 Geospatial Data Availability Status



The following is the status of availability of fundamental data for 2022:

4.0 Geospatial Services

PGN, NRECC as a coordinator through the MyGDI program, is committed to assisting various government agencies in developing GIS web platforms and applications that can assist federal and state government agencies in geospatial information management. Here are the GIS web platforms and applications that have been developed:

4.1 Malaysia Geospatial Online Services (MyGOS) dan Malaysia Geospatial Open Source (MyGeoSc)

Malaysia Geospatial Online Services (MyGOS) is a geospatial information sharing platform for Government Agencies online that enables information sharing in a secure environment. MyGOS is using a licensed software whereby MyGeoSc is using open source software. Both platform assists any Government Agencies which lack in infrastructure facilities such as GIS software and hardware by developing GIS Web Apps.

4.2 Malaysia Geospatial Data Infrastructure Explorer (MyGDI Explorer)

MyGDI Explorer is an Application about metadata catalogue that enables GIS users, developers and data suppliers to evaluate, access, visualize and publish geospatial information online. This online application is an initiative to facilitate the search, display, review, sharing and metadata management of geospatial information provides by government agencies. Users can access MyGDI Explorer from anywhere and at anytime.

4.3 Malaysia Geospatial Translator (MyGeoTranslator)

MyGeoTranslator is an Application stands for Malaysia Geospatial Translator to enable users to perform geospatial data processing online, such as data format conversion, coordinate system transformation, data structure conversion according to MS1759 structure - Geographic Information / Geomatics - Features and Attribute Codes and etc.

4.4 MyGDI Data Services

MyGeo Data Services is a web based application developed for geospatial data sharing between government agencies (Government to Government (G2G)). It is one of PGN initiatives under MyGDI program to provide a data sharing platform among government agencies in a secured environment to avoid the overlap of works in the collection, processing and provision of geospatial information between related agencies.

4.5 MS 1759 (Malaysian Standard for Geographic Information / Geomatics -Feature and Attribute Codes) The MS1759 application is a search engine for Geographic Information / Geometric Information - MS 1759: 2015 Details and Attributes Code. Users can search using categories and keywords. The search results will display the Details Code, Details Name, Details Description, Attribute Code and Attribute Name. This document has also referred to the ISO/TC 211 Standard Technical Committee at the international level so that it can be adapted to use in Malaysia.

4.6 UPI (Unique Parcel Identifier)

UPI is a unique method of identifying land parcels (lot) derived from a combination of finely grounded parcels of state, district, province, section and lot number. The UPI application can display spatial and textual information for finely tuned landscapes and landmarks.

4.7 MyGeoName

MyGeoName is a database that contains geographical name, history, legitimate gazetir notification and location information about geographical entities located throughout Peninsular Malaysia, Sabah and Sarawak. This database appears in a web gazetteer listed in alphabetical order.

MyGeoName was developed under the activities of the National Committee for Geographical Names (JKNG). PGN, NRECC is the Chairman of the National Geographic Names and Gazetteer Database Working Group (KKPDNG). All activities related to geographic naming are also reported to the United Nations Group of Experts on Geographical Names (UNGEGN).

5.0 Policies and Guidelines of MyGDI

The policy and guidelines are an important component for geospatial information's management and coordination in the development and implementation of MyGDI program. In this regard, a series of circular letters and guidelines have been issued by the MyGDI National Coordinating Committee (MNCC). The following is a list of policies and guidelines that have been issued:

Bil.	List of Policies and Guidelines
1.	Pekeliling Kemajuan Pentadbiran Awam Bilangan 1 Tahun 1997:
	Panduan Mengenai Penubuhan Sistem Infrastruktur Kebangsaan
	Bagi Maklumat Tanah / National Infrastructure for :Land Information
	System (NaLIS)
2.	Surat Pekeliling Kemajuan Pentadbiran Awam Bilangan 1 Tahun
	2001:
	Panduan Bagi Data Custodianship Infrastruktur Kebangsaan Bagi
	Sistem Maklumat Tanah
3.	Surat Pekeliling Pelaksanaan Infrastruktur Data Geospatial Negara
	(MyGDI) Bilangan 1 Tahun 2005:
	Garis Panduan Penentuan Harga dan Penyebaran Data Geospatial
4.	Surat Pekeliling Pelaksanaan Infrastruktur Data Geospatial Negara
	(MyGDI) Bilangan 1 Tahun 2006:
	Panduan Bagi Pembangunan Dan Pelaksanaan Infrastruktur Data
	Geospatial Negara / Malaysian Geospatial Data
	Infrastruktur (MyGDI)
5.	Pindaan Pertama Surat Pekeliling Pelaksanaan Infrastruktur Data
	Geospatial Negara (MyGDI) Bilangan 1 Tahun 2006:
	Pindaan kepada Struktur Pengurusan MyGDI (Lampiran A) Panduan
	Bagi Pembangunan Dan Pelaksanaan Infrastruktur Data Geospatial
	Negara / Malaysian Geospatial Data Infrastruktur (MyGDI)
6.	Surat Pekeliling Pelaksanaan Infrastruktur Data Geospatial Negara
	(MyGDI) Bilangan 1 Tahun 2008:
	Garis Panduan Custodianship Bagi Data Geospatial

7.	Surat Pekeliling Pelaksanaan Infrastruktur Data Geospatial Negara
	(MyGDI) Bilangan 1 Tahun 2009:
	Panduan Bagi Pembangunan Dan Pelaksanaan Pusat Data
	Geospatial / Geospatial Data Centre (GDC)
8.	Surat Pekeliling Pelaksanaan Infrastruktur Data Geospatial Negara
	(MyGDI) Bilangan 1 Tahun 2012:
	Garis Panduan Perkongsian Dan Penyebaran maklumat Geospatial
	Melalui Infrastruktur Data Geospatial Negara (MyGDI)
9	Surat Pekeliling Pelaksanaan Infrastruktur Data Geospatial Negara
	(MyGDI) Bilangan 1 Tahun 2014:
	Panduan Pemakaian Standard Maklumat Geospatial
10.	Garis Panduan Penyediaan Spesifikasi Produk Data Geospatial
	(2014)
11.	Garis Panduan Penilaian Kualiti Data Geospatial (2014)

6.0 Collaboration and Consultancy

PGN, NRECC has successfully assisted government agencies by using platforms such as MyGOS. The following are among the agencies that have collaborated and obtained consulting services from PGN, NRECC

- i. Kedah Regional Development Board (KEDA) KEDA GIS
- National Security Council (MKN) Placement and surveillance of COVID-19 cases
- iii. Department of Veterinary Services (JPV) Veterinary Online Maps (VENOM)
- iv. National Disaster Management Agency (NADMA) Areas at risk of floods, earthquakes, haze and waste hazardous disposed materials
- Public Works Department (JKR) Dashboard Applications Monitoring System of Potholes
- vi. Ministry of Domestic Trade and Cost of Living analysis, planning and monitoring of commodity prices and subsidies
- vii. Alor Setar City Council (MBAS), Kedah Monitoring System of the assessment tax collection

7.0 *Outreach* Program and Promotion

Various outreach activities have been carried out by PGN, NRECC to ensure that information reaches government agencies, academia, the private sector and citizens that related to geospatial as follows:

7.1 Organizing the National Geospatial Information Symposium (NGIS – *National Geospatial Information Symposium*)

Organized every two (2) years which aims to promote the use of geospatial information in national planning and development.

7.2 Exhibitions

The participation of PGN, NRECC in various exhibitions in various conferences, seminars and other events organized by the agency provides many benefits and direct information to the community.

7.3 Visits From Government Agencies and Academia to PGN, NRECC

PGN, NRECC has received visits especially from government agencies and Public Institutes of Higher Learning Education in sharing expertise, data, advice and consulting services related to geospatial.

7.4 Promotion and Publications

PGN, NRECC has published the MyGDI Newsletter related to geospatial three (3) times a year and the Public Sector Geospatial Bulletin (BGSA) once a year. This publication contains articles from various agencies related to geospatial activities that are intended as to share the importance of geospatial for the development and progress of the country.

8.0 Conclusion

PGN, NRECC has become a reference and represents the interests of agencies related to geospatial data. The implementation of MyGDI program has successfully increased awareness of the value of geospatial data in all federal and state government agencies. The cooperation of all federal and state agencies has successfully strengthened the development of the country's geospatial data.