



Integrated Geospatial Information Framework Status of Implementation in the Philippines 2023

The Philippines' Geospatial Information Management



IATFGI

1993 April 15

to promote and coordinate the efficient development, management, and utilization of geographic information in the country.



PNSDI/PGDI Implementation

2012

"a spatially-enabled nation with comprehensive and consistent geospatial datasets widely available and shared for sustainable economic, environment and social environment and management."

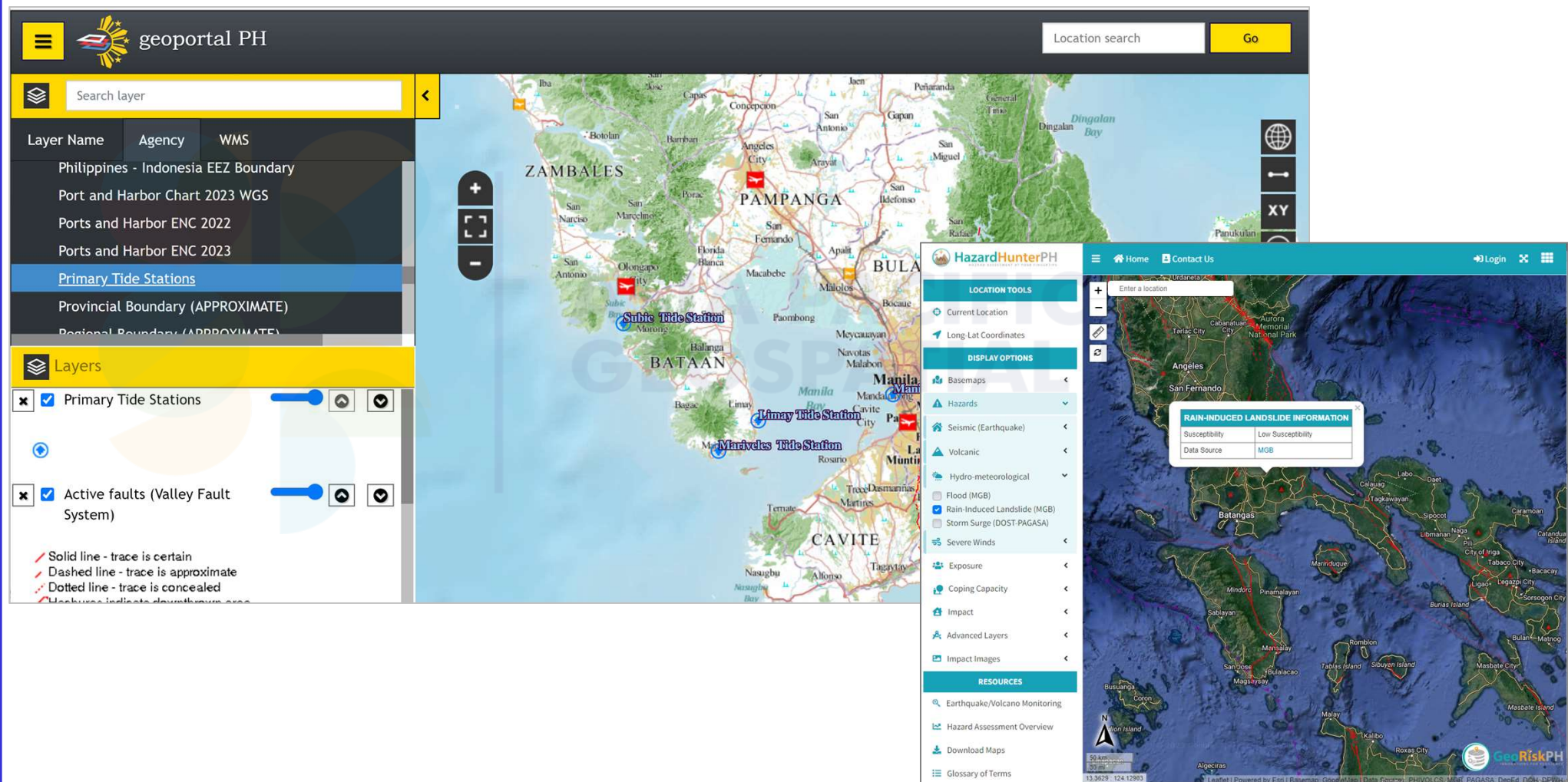
2003, the PNSDI Framework Plan was initiated

Geoportal Philippines



NSDI milestones

The Philippines' Geospatial Information Management



The Philippines' Geospatial Information Management



Republic of the Philippines
Department of Environment and Natural Resources
Visayas Avenue, Diliman, Quezon City
Tel. Nos. (02) 8920-0689 / 8925-8275 / 0917-885-3367 / 0917-868-3367
Website: <http://www.denr.gov.ph> / E-mail: web@denr.gov.ph

JAN 04 2023

DENR ADMINISTRATIVE ORDER No. 2023 - 01

SUBJECT : ESTABLISHMENT OF THE NATIONAL ENVIRONMENT
AND NATURAL RESOURCES GEOSPATIAL DATABASE
UNDER THE OFFICE OF THE SECRETARY

Pursuant to Executive Order No. 292 also known as the *Administrative Code of 1987* and Presidential directives to establish a national environment and natural resources geospatial database as a platform for the planning and implementation of integrated strategies of the DENR, the creation of an office on National Environment and Natural Resources Geospatial Database is hereby created.

Section 1. Basic Policy.

It is the policy of the state to promote the use of Information and Communication Technology (ICT) for the enhancement of key public services, including promoting sustainable development through technology enabled governance. It is also the policy of the State to undertake exploration, assessment, classification, and inventory of the country's natural resources using ground survey, remote sensing and complementary technologies.

Section 2. Objectives.

This Order aims to:

- 2.1 Establish, operate and maintain a national environment and natural resources geospatial database for DENR;
- 2.2 Promote the utilization of satellite remote sensing, machine learning, artificial



Republic of the Philippines
Department of Environment and Natural Resources
NATIONAL MAPPING AND RESOURCE INFORMATION AUTHORITY
www.namria.gov.ph

NOV 24 2022

MEMORANDUM ORDER

No. 008 / 01
Series of 2022

SUBJECT : Implementation of National Mapping and Resource
Information Authority (NAMRIA) Open Data Policy

I. RATIONALE

1. Open Data is an emerging trend in open government and e-governance worldwide, wherein governments voluntarily release various sets of data to the public through websites and other online platforms. This has led to increased transparency, accountability, and citizen participation; improved efficiency and coverage of public services; potential economic growth and job creation; and improved information-sharing within government. This policy will further enhance transparency in government and access to information by the public.
2. All units of NAMRIA are hereby required to implement the NAMRIA Open Data Policy as part of the Philippines' commitment to the Open Government Partnership and the agency's engagement to the Open Data Philippines.

II. PURPOSE

The NAMRIA Open Data Policy aims to improve the availability, accessibility and timely provision of geospatial information and services to the general public through strengthened coordination and cooperation, advanced use

The Philippines' Geospatial Information Management

Geoportal Philippines Data Road Map

Geospatial Foundation Data Themes		
Theme	Description	Agency
Geocoded Addressing	Unique street address of parcels/property	Philpost, P LGU Asse
Administrative Boundaries -International, National, Regional, Provincial, City, Municipal & Bgy -Electoral Boundaries -Zip Code	- Jurisdictional Boundaries - Precinct Boundaries, Cong Districts - Post Code Boundaries	DENR-LM NAMRIA; I other Ager COMELEC DENR-LM
Feature Names/Place Names	Official and local names of cultural and geographic features	NAMRIA (v LGUs)
Land Parcels	A consistent framework of land parcel boundaries defined for land tenure purposes, referenced to a common datum and including road casements	NAMRIA (v LGUs)
Imagery	Aerial photo and satellite image	NAMRIA (Other users, producers)
	Physical roads, airports, navigation	DPWH, DOTC, PPA

Primary Reference		
Theme	Description	Agency/Custodian
Geodetic Control Points	Geodetic control points; Geodetic survey marks (horizontal stations) and benchmarks (vertical stations)	NAMRIA; DENR-LMS

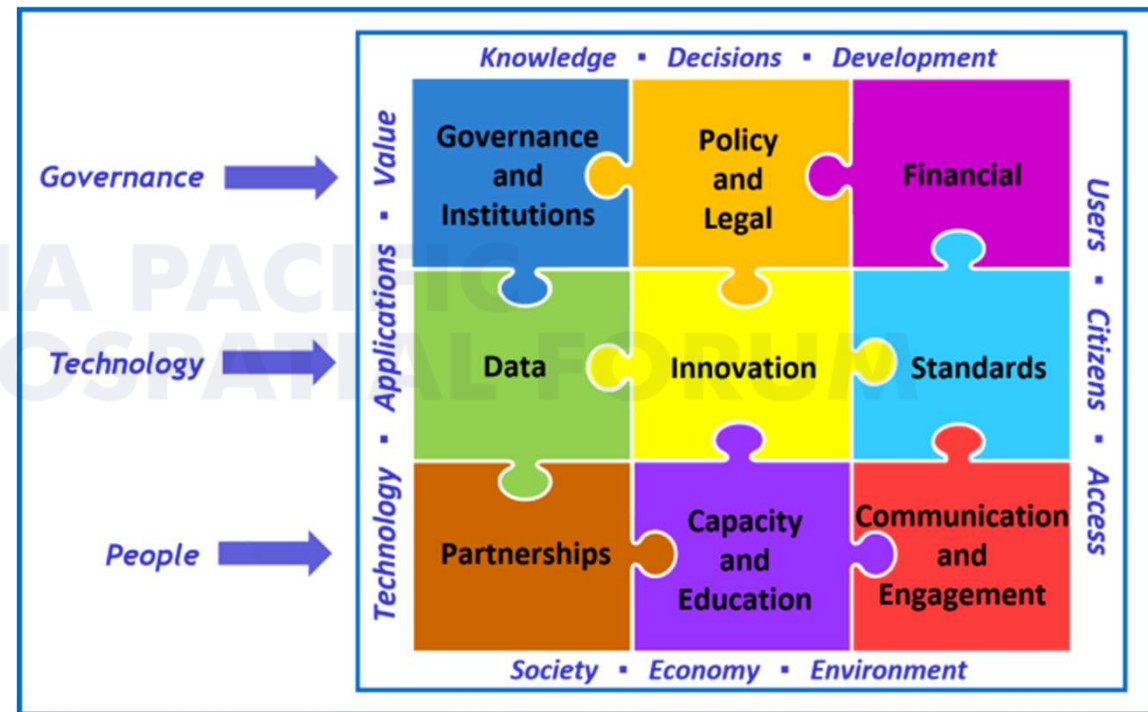
Proposed Fundamental Datasets for GP		
Framework Datasets (First priority)		
Theme	Description	Agency/Custodian
Hypsography	Geodetic Control Network	NAMRIA; DENR-LMB
Elevation		
Geographic Features		
Hydrology		
Orthoimage		
Topographic Map Database (National Common Spatial Database)	Contour, national road network, natural drainage system, settlement, vegetation	NAMRIA; DENR-LMB
Aerial Photography (Orthophoto/ Orthoimage)		NAMRIA
Satellite Imagery (VHR Orthoimage)		NAMRIA
Administrative Boundaries (National, Regional, Provincial, City, Municipal and Barangay)	Jurisdictional Boundaries	DENR-LMB (with NAMRIA; NSO; LGUs; other Agencies)
Electoral Boundaries	Precinct Boundaries, Congressional Districts	COMELEC; (with NSO; DENR-LMB)
- Zip Code	Post Code Boundaries	Philpost

The alignment of PGDI with IGIF

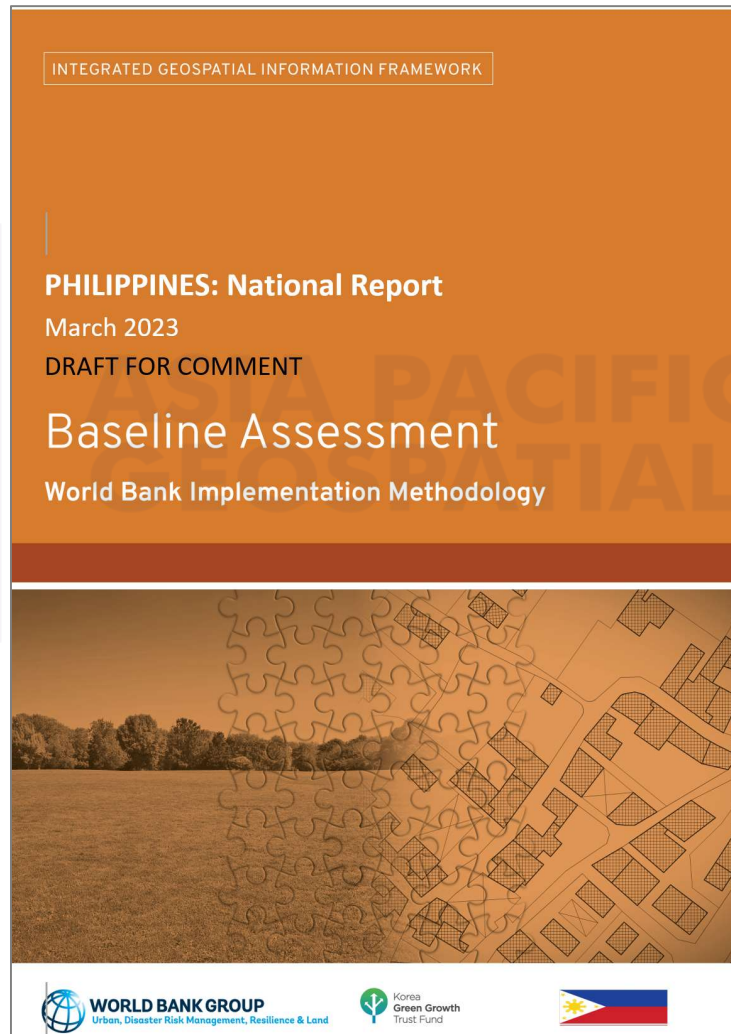
PDGI



IGIF

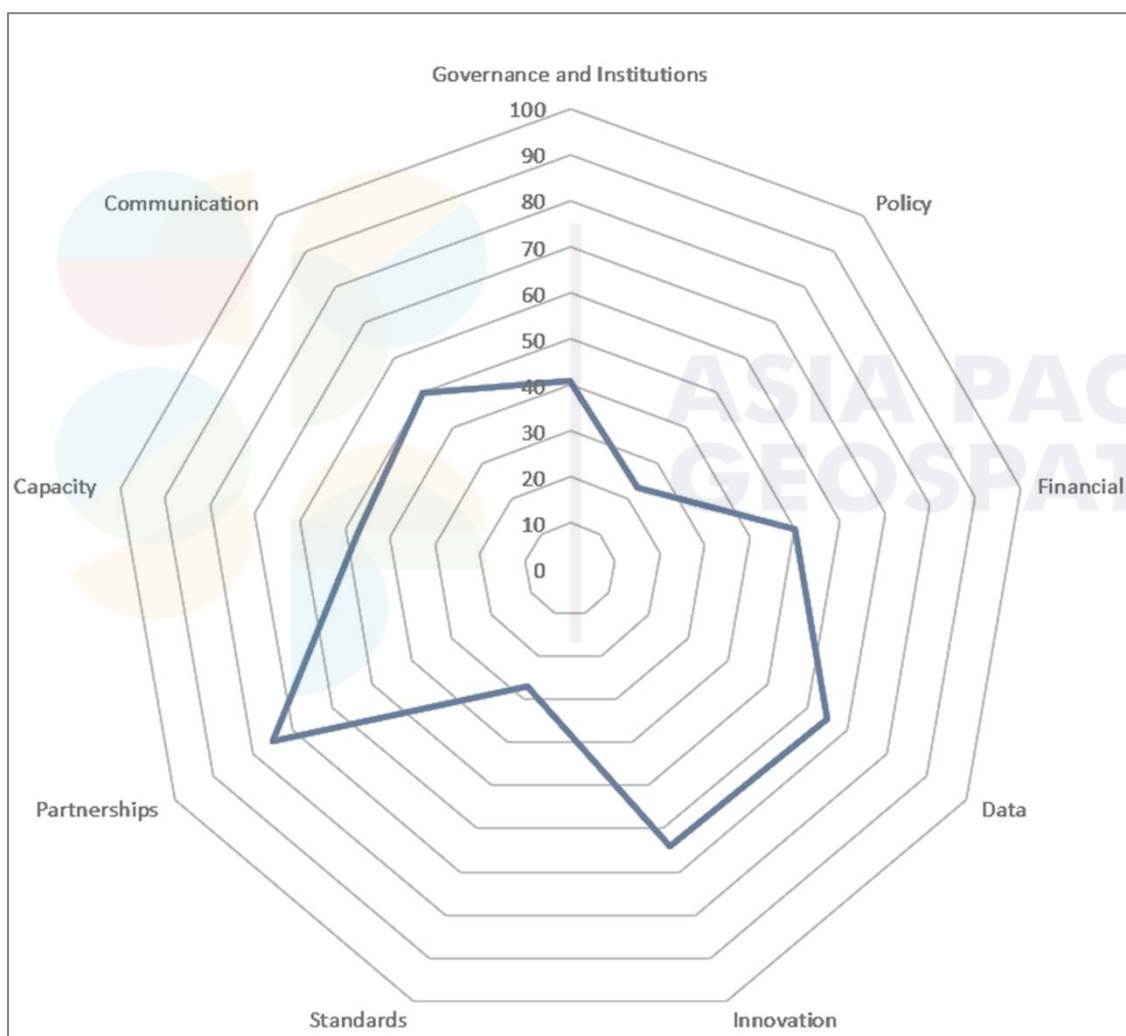


The assessment



ASIA PACIFIC
GEOSPATIAL
FORUM

The assessment

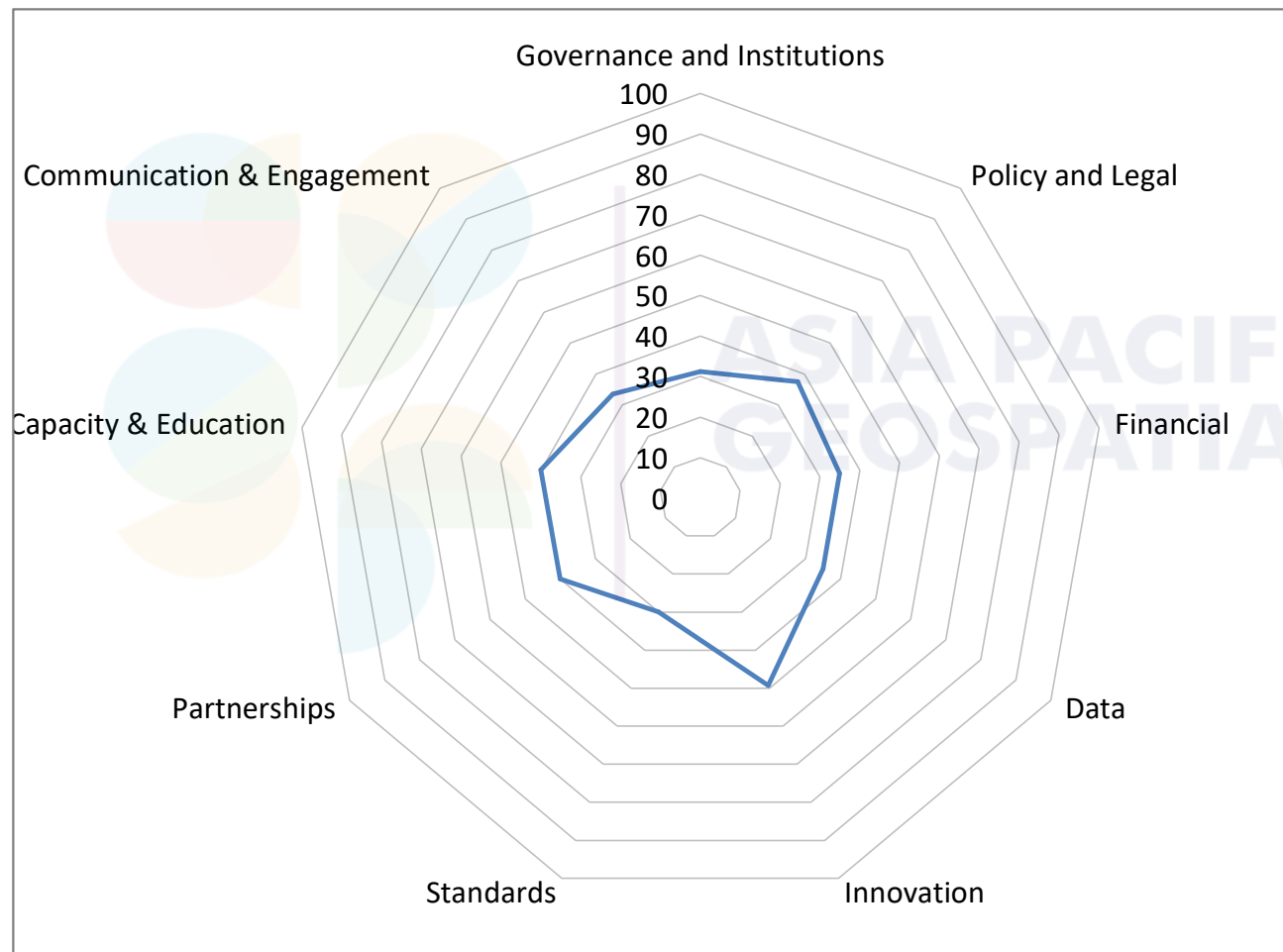


Land

Strategic Pathways	Score
SP 1 – Governance and Institutions	41
SP 2 – Policy and Legal	23
SP3 – Financial	50
SP 4 - Data	65
SP 5 - Innovation	64
SP 6 - Standards	27
SP 7 – Partnerships	75
SP 8 – Capacity and Education	47
SP 9 – Communication and Engagement	50

The assessment

Marine



Strategic Pathways	Score
SP 1 – Governance and Institutions	31
SP 2 – Policy and Legal	38
SP3 – Financial	35
SP 4 - Data	35
SP 5 - Innovation	49
SP 6 - Standards	30
SP 7 – Partnerships	40
SP 8 – Capacity and Education	40
SP 9 – Communication and Engagement	34

The assessment

Key findings:

- Lack of effective leadership
- No business case
- Duplication of cost
- Strategic vision missing
- Inadequate resources
- Weak interoperability

The Next Move

BY THE PRESIDENT OF THE PHILIPPINES

EXECUTIVE ORDER NO. ____

ADOPTION OF AN INTEGRATED APPROACH TO GEOSPATIAL INFORMATION MANAGEMENT, AND CREATION OF AN INTER-AGENCY COMMITTEE ON GEOSPATIAL INFORMATION MANAGEMENT

WHEREAS, Section 24, Article II of the 1987 Constitution enshrines the policy that the State recognizes the vital role of communication and information in nation-building;

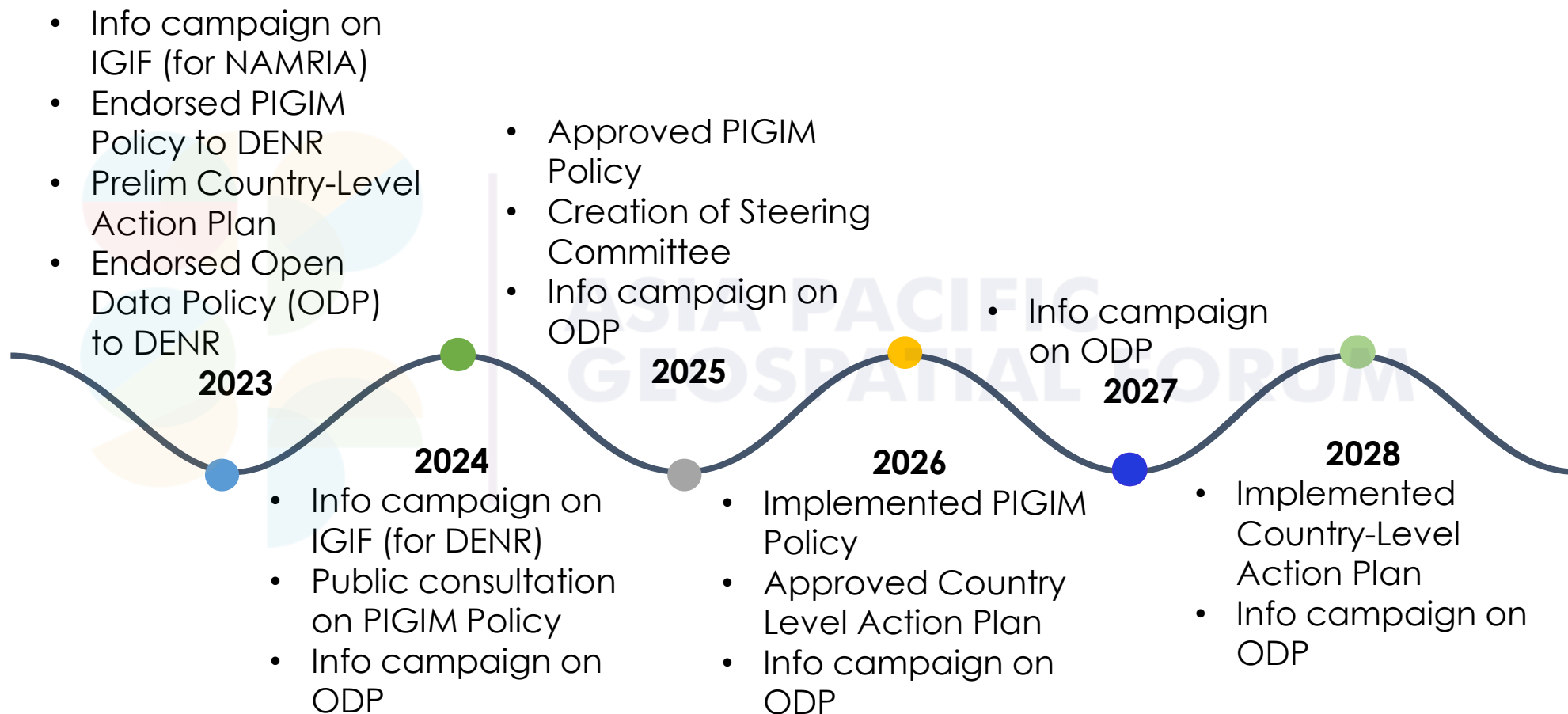
WHEREAS, the national government prioritizes the shift towards the digitalization of the economy, including targeted investments in technological innovations and digital connectivity - all with the aim of transforming the government into an agile bureaucracy with science- and ethics-based decision-making;

WHEREAS, many countries have long recognized the strategic importance of geospatial information and have established geospatial data infrastructure to further promote their country's economic development, productivity, delivery of public services, and global competitiveness;

WHEREAS, the Philippines recognizes the importance of geospatial information in the country's social, economic, and physical development, stewardship of natural resources, protection of the environment, climate change adaptation, disaster risk reduction and management, public safety, national security and defense, effective governance, and global competitiveness towards pervasive societal progress;

WHEREAS, national and local government agencies are undertaking their respective programs, projects, and activities to acquire and generate geospatial or geographically referenced information to improve the delivery of their public services;

The Next Move: PIGIM Timeline



6-Year Targets

The vision



a geospatially-empowered Philippines