



**United  
Nations**

Department of  
Economic and  
Social Affairs



Ministry of Technology and Communications (MTC)

# Capacity Development and Consultation Workshop on Lao PDR National Data Governance Framework

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## Initial Findings of a baseline study of Lao PDR National Data Governance

# Background

- According to the UN E-Government Survey 2022, Lao ranking increased from 167 in 2020 to 159 in 2022 among 193 member states.
- Provision for Lao PDR to advance alongside with neighboring countries such as Myanmar (134), Cambodia (127) and Viet Nam (86)
- Challenges remain, such as the high cost of the internet, the urban-rural divide, and a lack of regulatory architecture.

# Data Governance Framework

## ELEMENTS

1. Data standards and classification

2. Data sharing, exchange and interoperability

3. Data security (and protection)

4. Data privacy (and ethics)

5. Data Infrastructure

6. Digital Identity

7. Data Literacy

## PILLARS

Policies & Regulations

Institutions

Processes

People (roles and responsibilities)

## PRINCIPLES

Accountability

Effectiveness

Inclusiveness

# Four Pillars

Policy	it refers to a means of legitimizing data governance for effective leadership through strategies, policies, directives, and other regulatory documents.
Institutions	it refers to a means of institutionalizing data governance for effective leadership. Establishment of institutional organs whose mandate is leading coordinating, enforcing, standardizing, and managing data governance elements.
People:	it refers to capacitating people (role-based capability - knowledge and skill) and involvement of the people in various activities of data governance.
Processes	it refers to operationalizing or defining data related structured work processes in realizing data policies, grounding institutional arrangements, building people capability and any other data related operations

# Six Elements

**Data Standardization** refers to a process of defining the data format and semantic definitions for entities or concepts being used by an institution with appropriate data quality specification to ensure data quality.

**Data classification** is a process of organizing data into relevant categories to facilitate data sharing and manage risks related to data access and use.

**Data sharing and interoperability** refers to the process of defining proper access and use of shared data across parties in the institution or with external entities as per the required level of data quality keeping smooth data movement and communication among multiple systems. An effective collaboration mechanism for data sharing and interoperability of government data is needed.

**Data security** refers to the policies, practices, and control rules used in the institution to mitigate risks and protect all data assets in the data life cycle (collection, use, share, storage and deletion of data) management to achieve data confidentiality, data integrity and data availability. It also acts in line with the data classification scheme.

# Six Elements

**Data privacy and ethics** refer to the right of individual to protect her personal data across the data life cycle (collection, use, storage and deletion of data) management. Maintaining privacy of data is crucial since data storage, access and sharing are highly interlinked to personal identity and business entities.

**Data infrastructure refers** to the physical environment and software utilities to accommodate and support all activities in the data life cycle (collection, use, storage and deletion of data) management. Data infrastructure provides systematic design and manage infrastructure for storing, processing, accessing and securing data.

**Linking data with digital identity** refers to the process of linking or mapping institutional data to citizens' national identity. It plays a central role since it provides the basis on which data can be safely and securely shared within and across the institution to improve public services and their delivery.

# Objectives

- To analyze the current situation of data governance of Lao PDR based on the framework of 4 pillars and 6 elements
- To do a SWOT analysis of the existing national data governance framework

# Study Approach

Approach	Description
Desk reviews	collecting data from available sources such as policy documents, legislation documents, survey reports, annual reports, and international reports
Stakeholder analysis	process of identifying and analyzing individuals or entities that are involved in the data governance ecosystem.
Questionnaire survey	general information, organization, role and responsibilities of respondents, and questions regarding the perception of respondents on data governance
In-depth interviews with key stakeholders	Open-ended questions are used during the interviews



# Stakeholders in data governance

Cluster	Description	Institutions
<b>Core-regulatory</b>	They have a key role in regulating, standardizing, and collecting data.	Ministry of Technology and Communication Bank of Lao PDR Ministry of Planning and Investment
<b>Cross-sectoral</b>	They focus on the production, storage, dissemination, administration of data that can be consumed by different sectors	Lao Internet Center, MTC Digital Government Center, MTC LaoCERT Immigration Department, MOPS Ministry of Resources and Environment Ministry of Home Affairs Ministry of Public Security
<b>Sectoral</b>	Based on the mandate, their responsibility is confined to the sector.	Ministry of Finance Ministry of Health Ministry of Public Work and Transportation Ministry of Agriculture Ministry of Educations Ministry of Labour and Welfare

# Stakeholders in data governance

Cluster	Description	Institutions
<b>Civil Societies</b>	Their main roles confine to mandates.	Lao National Chamber of Commerce and Industry Lao Women Union Young Entrepreneurs of Laos Disability Center
<b>Private Sector</b>	They collect data to improve services to customers and for marketing purposes.	Loca Food Panda BCEL Lao Telecom Unitel ETL Best Telecom Lapnet Lao Credit Information Company

# Pillar-Element Mapping Matrix of Lao PDR

Elements→ Pillars↓	Data standards & classification	Data sharing, interoperability, and open Government data	Data security	Data privacy (and ethics)	National data infrastructure	Link with digital identity
Policy: existing policy and regulatory framework						
Institutions: existing institutional framework						
People: existing data ecosystem and mapping of stakeholders						
Processes: existing data processes						

# SWOT Analysis of Lao PDR's Data Governance Framework

## Strengths

- ✧ Ambition to realize digital governance by carrying out short-term, mid-term and long-term plans in lined with national development plans and international agreements
- ✧ Proactive cooperation with regional and global institutes in terms of e-Government strategy and practices
- ✧ Comprehensive digital tools, services and training that contribute to effective operation of public sector
- ✧ Continuous attempts to enact laws and regulations on telecommunications and data security
- ✧ Numerous efforts paid to infrastructure construction
- ✧ Open to the public feedback for better people engagement

## Weaknesses

- ✧ Lacks enough methods to improve digital inclusion, and more special attention should be paid to marginalized groups to improve their digital literacy and skills
- ✧ Data resides mostly in silos in line ministries with limited interoperability and exchange
- ✧ Lack of digital public standards and data protection legislation
- ✧ Missing instruments to coordinate the digital transformation initiatives of the line ministries at Government level
- ✧ Few usages of emerging technologies, such as artificial intelligence, big data and IoT
- ✧ Limited data infrastructure, including data centers, cloud computing, and data services,
- ✧ Lack of sufficient capacity and expertise in data governance

# SWOT Analysis of Lao PDR's Data Governance Framework

## Opportunities

- ✧ Special geological location makes it possible for Lao PDR to become an Internet gateway between China and ASEAN
- ✧ Covid-19 produces new needs for e-service and e-Government based on data
- ✧ Benefits from Technology break-through
- ✧ Establish collaborative partnerships with international organizations, other countries, and stakeholders
- ✧ Harness the power of data to inform policy-making processes, enable evidence-based policymaking, and enhance accountability and transparency in governance.

## Threats

- ✧ Limited awareness and understanding of data governance.
- ✧ Constraints in terms of funding, technology, and human capacity for developing and implementing a robust national data governance framework.
- ✧ Potential misuse of data, including data breaches, unauthorized access, and data manipulation.
- ✧ Development lags in e-Governance compared with neighboring countries
- ✧ Effectiveness and uncertainty under the Covid-19
- ✧ Regional geopolitics environment



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Thank You

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