DATA GOVERNANCE:

Conceptual framework & national profiles



Workshop on Modernizing Statistical Legislation
Tirana, Albania
29-30 May 2024

Data governance is defined as
the exercise of authority and control
over the management and transformation of data
with the objective of enhancing the value of data
assets and mitigating data-related risks.

DATA GOVERNANCE FRAMEWORK

PILLAR 1

PILLAR 2

PILLAR 3

PILLAR 4

PILLAR 5



Vision and policy intent



Data
management
policies,
rules
and
institutions



Data custodians and data stewards

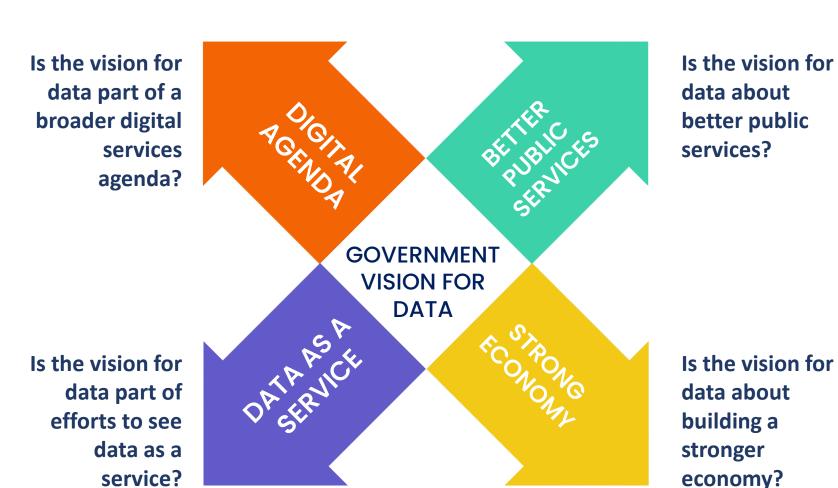


Data sharing,
data
accessibility
and
data
integration



Data sharing, risks and mitigation

VISION AND **POLICY** INTENT



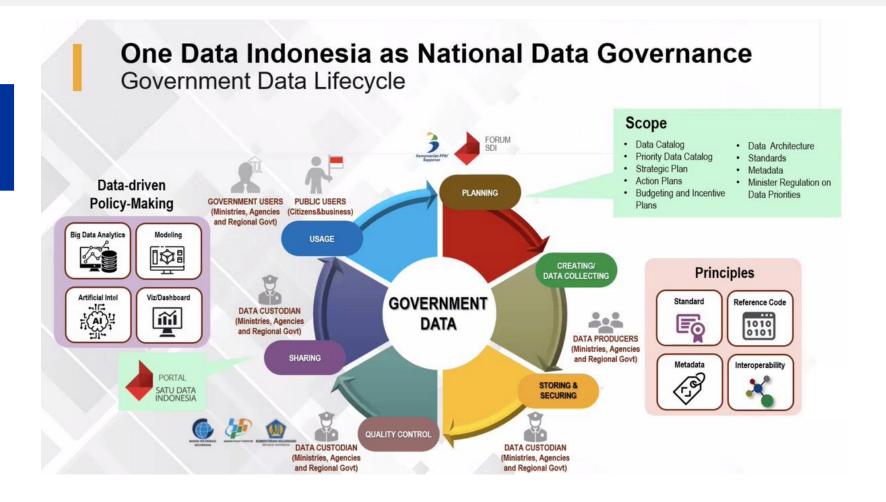
Is the vision for data about building a stronger economy?

1. Vision and policy intent: Indonesia

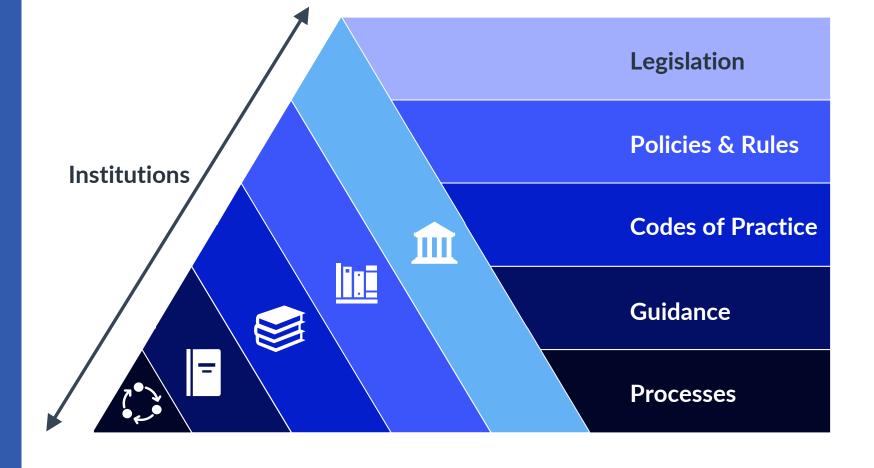


One Data Indonesia

Aims to make government data timely and accurate, increase the use of data for policy, and allow for integrated and interoperable data platforms across central and local government



POLICIES, **RULES AND INSTITUTIONS THAT GOVERN DATA** MANAGEMENT **PRACTICES**



DATA CUSTODIANS AND DATA STEWARDS

5

Data Custodians

- Perform a specific data management role
- Manage the process of data collection, storage and retrieval
- Ensure quality assurance at source and data privacy at source

Provide a data management role



Data Stewards

- Perform a professional function over and above the data production processes
- Assess and promote the use of data, identify shortcomings in the data system and strive to meet the needs and build trust of data users

Provide a longer term, more strategic perspective

THE ROLE OF **GOVERNMENT DATA STEWARD** IS EVOLVING **AND NSOS ARE RESPONDING IN DIFFERENT** WAYS



NSO is whole of government data steward



NSO supports another agency taking government data steward role



NSO one stakeholder with no one agency taking the government data steward role

DATA
SHARING,
DATA
ACCESSIBILITY
AND DATA
INTEGRATION





Challenges

- Need quality administrative data
- Need public approval
- Need a legal basis
- Need collaboration mechanisms
- Need technical skills

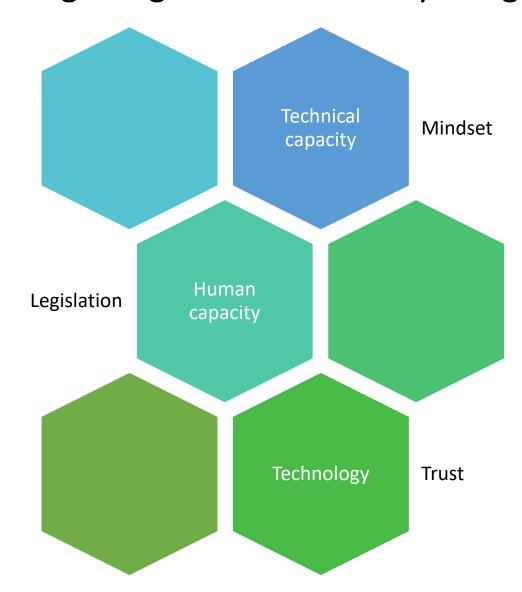


Opportunities

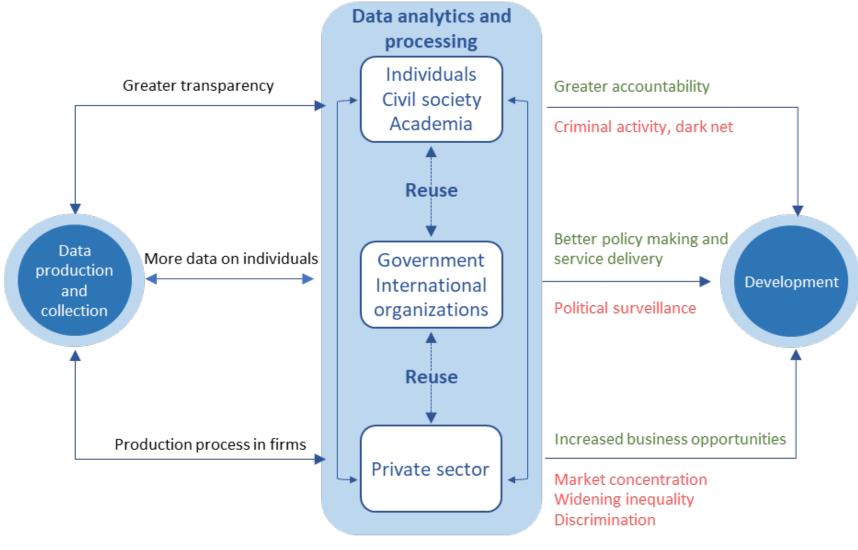
- Bridge data gaps
- Reduce response burden
- Provide granular data
- Improve relevance
- Improve coverage
- Improve timeliness
- Improve frequency
- Lower costs

DATA INTEGRATION IS HARD BUT WORTHWHILE

Integrating data needs many things:



DATA SHARING RISKS AND MITIGATION



Note: Positive impacts are shown in green; negative impacts are shown in red

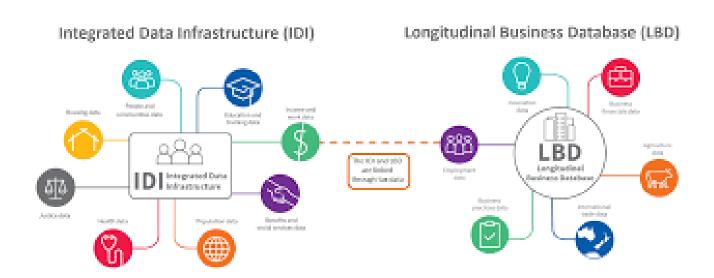
5. Data sharing, risks & mitigation: New Zealand using Five safes' framework



Figure 1 Five safes' framework



Source: Stats NZ



WHAT HAPPENS NEXT?



Data governance framework and 1-page profiles

Global handbook incorporates country profiles

One page country data governance profiles

Australia	Papua New Guinea
<u>Fiji</u>	<u>Philippines</u>
<u>India</u>	Republic of Korea
<u>Indonesia</u>	<u>Singapore</u>
<u>Japan</u>	Solomon Islands Tajikistan Thailand
Malaysia	
<u>Mongolia</u>	
<u>Nepal</u>	
New Zealand	<u>Türkiye</u>
<u>Pakistan</u>	<u>Viet Nam</u>

Disclaimer: All profiles were produced by ESCAP to illustrate differing data governance arrangements and practices and reflect the situation from when they were compiled. Refer to the country's own website for the latest information.

Indonesia: Data governance profile



1. Vision and policy intent

The government is committed to leveraging digital technology to bring greater social cohesion, support a digital economy and provide better public services.

This commitment requires a transformation in government data, which the government aims to achieve through its One Data Policy Initiative launched through a Presidential Regulation in 2019.

This policy aims to make government data more timely, accurate, accountable, and accessible. It also aims to strengthen data sharing and integration arrangement between government institutions and to make better use of government data and official statistics for policy making.

The policy is envisaged to become a **governance framework** that would allow the development of integrated and interoperable data platforms across central and local government through a common standard.

2. Data Management: policies, rules & institutions

Moving towards Indonesia One Data entails **data principles**: Data Standards, Metadata standards, Interoperability, and Reference Code.

The Presidential Regulation assigned responsibilities to:

- National Data Steering Council is responsible for national data policy and evaluating its implementation.
- The Ministry of National Development Planning leads the Council and has overall responsibility for One Data implementation.
- BPS-Statistics Indonesia as a national data steward provides guidance, statistical recommendations and technical assistance.
- Data Forum facilitates collaboration among stakeholders to resolve data needs and issues.
- Data steward in a government institution is responsible for data management, security, quality, sharing, and dissemination.
- Data Producer is responsible for producing data that meets data quality standard.

3. Data custodians and data stewardship

Challenges in transforming government data are the need to improve data capability and capacity for producing quality data, to strengthen coordination among ministries and government agencies, and to align sectoral data regulations owned by ministries and government agencies with the One Data governance framework.

The roles of data custodian and data steward are set up and performed by an organization unit called the **Center of Data and Information** in every ministry, government agency and local government.

BPS is empowered by Law
Number 16 Year 1997 on Statistics
to serve as a National Data
Steward that has responsibility of
providing guidance on data
standards, metadata standards,
and data interoperability, and
building statistical capacity
through technical assistance and
trainings to government
institutions in central and local
governments.

4. Data sharing, accessibility and integration

The government facilitates **One Data Portal** as a means of
government institutions to share
their data and to give access to
public by providing data sets with
various topics in open data
format.

The government has initiated socio-economic register to capture the entire population about their profile, social economic condition, and welfare level. The database of socio-economic register is linked to population master database, while other databases owned by other government institutions will be synchronized to this database.

Under e-Government priority initiative, the Ministry of National Development Planning is assigned to develop data platform utilized across government institutions.

In addition, with the mandate of Presidential Regulation Number 132 Year 2022 on National e-Government Architecture, BPS has been developing a National Statistical Infrastructure System to support statistical production, big data utilization, and One Data implementation under the National Statistical System.

5. Data sharing, risks & mitigation

To avoid and mitigate personal data breaches that may cause some violations of confidentiality and privacy to individual, as well as significant losses of economy, competitiveness and reputation to organization, Law Number 27 Year 2022 on Personal Data Protection and Presidential Regulation Number 95 Year 2018 on e-Government provides legal basis for personal data protection and information security to organizations and government institutions.

BPS-Statistics Indonesia implements data confidentiality and security by applying non-disclosure control, providing secured IT systems, controlling the use of micro data, training enumerators in data collection handling, and setting data access rights.

BPS-Statistics Indonesia collaborates with the National Cyber and Crypto Agency in securing IT system and infrastructure, improving security skills, and joining a member of Indonesia Cyber Incidence Response Team (CSIRT).

New Zealand: Data governance profile



1. Vision and policy intent

Stats NZ is New Zealand's lead agency for government-held data. Its goal is to provide quality, trustworthy data and statistics with which New Zealanders can make evidence-based decisions. At the heart of this work is transparency, trust, and integrity around the use of data the government holds.

The nation's highly decentralized government model grants agencies autonomy separate from the Executive Branch.

Stats NZ sees success as a data system that is both inclusive and integrated. A system where anyone who wants to base their decisions on credible information can do so with ease. A system that generates the deepest insights and the best services, at the least effort to the people and organisations behind the data.

2. Data Management: policies, rules & institutions

New Zealand's most important official statistics, classified as 'Tier 1,' are produced by Stats NZ and 15 other government bodies. They adhere to a framework of principles and protocols based on the UN Fundamental Principles of Official Statistics. The framework was written in 2007 and is currently under review.

In 2017, the Government Chief
Data Steward (GCDS) role was
established, held by Stats NZ's
Chief Executive, to drive data's
value realization across
government. The GCDS leads
efforts, as highlighted by the 2021
Government Data Strategy and
Roadmap. This includes:

- A Data Investment Plan;
- An Open Data Charter Plan to ensure data is open, inclusive, accessible, and findable
- A Data System Maturity Assessment; and
- An updated approach to mandating and managing standards.

A new <u>Data and Statistics Act 2022</u> strengthened the role of the GCDS to make the best use of data collected and held by govt while ensuring private and confidential information is held securely and used appropriately.

3. Data custodians and data stewardship

Data stewardship: is defined In a 2018 policy document, as follows:

- a) to create a safe, high-trust data environment supported by public confidence;
- b) to improve availability and accessibility of govt data;
- c) to establish sustainable data capability across govt; and
- d) to establish partnerships to innovate with data and solve complex problems.

Two key governance bodies support the role of the GCDS:

- The <u>Information Group</u>, the key advisory body for the GCDS;
- The <u>Digital Government</u>
 <u>Leadership Group</u> which
 supports the GCDS and the
 <u>Government Chief Digital</u>
 <u>Officer</u> to develop and
 improve digital and data
 systems and ensure they are
 aligned with the <u>Government</u>
 <u>Data Strategy and Roadmap</u>
 and the <u>Strategy for a Digital</u>
 Public Service.

The GCDS has developed a data stewardship framework and toolkit to help govts to better manage and safely access data and to ensure that data is managed as a valuable asset and used ethically. Agencies will often appoint a data custodian.

4. Data sharing, accessibility and integration

Sharing across government occurs through Information Sharing Agreements (Privacy Act 2020) and other specific arrangements. The Government Chief Privacy Officer is establishing an information sharing centre of excellence.

Sharing is regulated by the Privacy Commission.

Stats NZ provides two large collections of integrated administrative and survey data:

- The Integrated Data
 Infrastructure (IDI) holds
 integrated microdata about
 people and households.
 Researchers use the IDI to
 conduct cross-sectoral
 research on complex social and
 economic issues; and
- The Longitudinal Business
 Database (LBD) holds deidentified microdata about
 businesses. Data comes from a
 range of Stats NZ surveys and
 government agencies.
 Researchers use the LBD to
 evaluate policies and analyse
 business performance.

5. Data sharing risks & mitigation

Stats NZ uses a 'five safes framework' and Ngā Tikanaga Paihere to protect privacy and guide ethical use of data. Before data is made available to approved researchers, all personal identifiers are removed or encrypted to ensure the data records are not associated with named individuals.

The Ngā Tikanaga Paihere framework uses Māori concepts to guide the ethical and culturally appropriate use of data.

Access is only provided if all the 'five safes' conditions are met: safe people, safe projects, safe settings, safe data, and safe output.

The GCDS supports a Data Ethics Advisory Group available to all government agencies



Tajikistan: Data governance profile

AGENCY ON STATISTICS UNDER PRESIDENT OF THE REPUBLIC OF TAJIKISTAN



1. Vision and policy intent

Tajikistan's National Development Strategy
of the Republic of Tajikistan
for the period up to 2030
envisages a steadily growing,
competitive country that provides
decent living standards for the
population, equal opportunities
for each person to realize his or
her potential on the basis of
equality, justice and respect for
human dignity.

The strategy includes goals (e.g. "strengthening the legal framework for the information society" and "developing egovernment services.") that require effective data collection, analysis, and utilization to be achieved effectively.

National Development Strategies and the Poverty Reduction stress the importance of relevant and reliable statistical data to make decisions for successful program implementation and identify the demand for expanded capacity to analyze and interpret statistics in support of evidence-based policy making and implementation monitoring.

2. Data Management: policies, rules & institutions

The Interdepartmental Council on Statistics under the Agency on Statistics under the President of the Republic of Tajikistan is an advisory body for coordinating activities in the field of organizing state statistical observations based on scientifically based statistical methodology. The interdepartmental working group directly carries out work on improving the methodology of statistical accounting and strengthening interdepartmental activities.

3. Data custodians and data stewardship

The <u>Statistical Agency</u> under President of the Republic of Tajikistan is the central statistical office of the country. The Agency on Statistics is administratively autonomous and its head serves as the country's chief statistician who reports to the President and government.

The Statistical Agency is responsible for population censuses, household surveys, demographic statistics and a wide range of economic statistics involving establishment and enterprise surveys, as well as prices, international trade, the national accounts, government finance, agricultural, labor and social statistics.

In the case of social statistics, the Agency on Statistics compiles the data from administrative records of corresponding Ministries. The National Bank of Tajikistan (NBT) compiles monetary data.

4. Data sharing, accessibility and integration

The Agency on Statistics at the President of the Republic of Tajikistan provides the official portal offering statistical data across various sectors like demographics, economy, agriculture, and social indicators.

The Statistical Agency is authorized by law to keep the state statistical register - a tool of statistical accounting containing an obligatory list of administrative and primary statistical indicators characterizing the activity of statistical units according to the Unified system of technical-economic and social-information classification and coding.

5. Data sharing, risks & mitigation

The statistics collected and disseminated by the Statistical Agency are governed by the Law of the Tajik Republic on State Statistics (No 588, dated January12,2010) that establishes the independence of the Statistical Agency and guarantees the confidentiality of the data provided by the individual statistical units.

Tajikistan's data protection framework relies on several different laws and regulations including:

- Law on Personal Data (PDPL):
 This is the central piece of legislation outlining the core principles of data protection, including definitions of personal data, processing requirements, and data subject rights.
- Constitution of the Republic of Tajikistan: Article 23 guarantees the right to protection of personal data.
- Law on Information: This law sets out general principles concerning information access, dissemination, and storage.

Türkiye: Data governance profile



The preparations towards a new Digital Government Strategy, which will set out the roadmap of Türkiye in its transition from an "e-government" to a "digital government" for the upcoming period, is currently in progress.

The new <u>Digital Government</u>
<u>Strategy</u>, a successor of the 2015-2018 Information Society Strategy and Action Plan and the 2016-2019 National e-Government
Strategy and Action Plan, is being prepared with the vision of a data-driven government structure and a user oriented public service delivery.

Data dictionary and corporate architecture activities continue with the purpose of providing a more sustainable structure for the corporate information systems needed for Digital Türkiye (e-Government) service delivery.

This will eliminate obstacles hindering data sharing among public institutions and provide high quality integrated services with high value added.

2. Data Management: policies, rules & institutions

The <u>Digital Transformation Office</u> will lead the implementation of the digital transformation ecosystem by enhancing the performance of public institutions and increasing the efficiency and quality of their services in line with the goals, policies and strategies set by the President of the Republic of Türkiye.

The <u>Turkish Statistical Institute</u> (TurkStat) plays a crucial role in collecting, compiling, and disseminating official statistics, setting and implementing data standards, and promoting data literacy.

The Information and Communication Technologies
Authority is responsible for developing and implementing policies and regulations related to information and communication technology, including those related to data privacy and cybersecurity

3. Data custodians and data stewardship

Duties of Turkstat under the Statistics Law include Data Stewardship functions in relation to Official Statistics including:

- Determining the statistical methods, definitions, classifications and standards to be used in the production of official statistics in line with national and international norms; and
- Identifying the standards for the establishment of the national register systems, implement these standards, and to ensure their observance through interagency coordination

The <u>Digital Transformation Office</u> also plays a central role in whole-of-government data stewardship The DTO leads and coordinates efforts to ensure the effective and efficient management, utilization, and sharing of government data across all agencies.

4. Data sharing, accessibility and integration

The Digital Transformation Office is developing the National Open Data Portal to make the data available to the public as open government data. The National Open Data Portal is a data sharing platform that will present anonymized and confidential open government data to citizens.

DTO has launched the National Data Dictionary project, which will include standards and definitions for the data used by public institutions and organizations in all application, platform and infrastructure layers.

The First Step Towards Generating Value from Data

National Data Dictionary



Several sector-specific initiatives are underway to integrate and share data within specific domains, such as healthcare, education, and agriculture. These initiatives aim to improve efficiency, effectiveness, and evidence-based decision-making in their respective sectors.



5. Data sharing, risks & mitigation

Several regulations and laws in Turkey govern data sharing and use, aiming to strike a balance between promoting data-driven innovation and protecting personal privacy.

The <u>Law on the Protection of</u>
<u>Personal Data</u> sets out principles
for collecting, storing, processing,
and transferring personal data,
including consent requirements,
data security measures, and
individual rights.

Regulation on the Processing of Personal Data in the Electronic Communications Sector sets out specific rules for the processing of personal data in the electronic communications sector.

Turkish Criminal Code contains provisions criminalizing various data-related offenses, such as unauthorized access to personal data, unlawful use of personal data, and data breaches.

Law on Information and Communication Technologies (ICT Law) establishes the ICT Authority and assigns it responsibility for developing and implementing policies and regulations related to ICT, including data privacy and cybersecurity.

https://www.unescap.org/our-work/statistics/data-governance

One page country data governance profiles



Stats Brief - Data governance: practices in Asia and the Pacific



Data governance arrangements vary across Asia and the Pacific and data governance practices are continually evolving.

This paper presents a data governance framework with five pillars. The framework provides a basis for describing national data governance arrangements in different countries.

National statistical offices can use the country profiles to consider the role they play in their own country's national data governance arrangements and how that compares with other countries. *Read more...*

Further information