

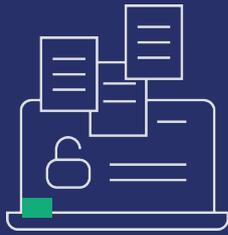


SDAIA

الهيئة السعودية للبيانات
والذكاء الاصطناعي
Saudi Data & AI Authority

National Data Governance Policies

Version 1 - 5/5/2020



Open Data Policy

5. Open Data Policy

Open data is a subset of public information according to the classification levels described in the “Data Classification Policy” section.

5.1 Scope

The provisions of this policy shall apply to all (unprotected) public data and information produced by public entities, regardless of their source, form or nature. This shall include paper records, emails, information stored on computers, audio or video cassettes, maps, photographs, manuscripts or handwritten documents, or any other form of recorded information.

5.2 Main Principles for Open Data

Principle 1: Open by Default

This principle ensures making the data of public entities available for all through disclosing, providing access to, or using such data, unless its nature requires non-disclosure or protection of its privacy or confidentiality.

Principle 2: Open Format and Machine-Readable

Data shall be made publicly accessible in a machine-readable format that allows automated processing. Data shall be stored in widely used file formats (such as CSV, XLS, JSON, XML).

Principle 3: Up to Date

The latest versions of open datasets shall be regularly published and made available to the public in a timely fashion. Whenever feasible, data collected by public entities shall be released as quickly as it is gathered. Priority shall be given to data whose utility is time sensitive.

Principle 4: Comprehensive

Open datasets shall be as complete and as granular as possible, reflecting recorded data, in compliance with the Personal Data Privacy Policy.

Metadata that defines and explains raw data shall be included along with explanations or formulas for how data was extracted or calculated.

Principle 5: Non-discriminatory

Datasets shall be made available for all without discrimination or requirement for registration. Any person shall be able to access the published open data at any time without having to identify him or to provide justification for gaining access thereto.

Principle 6: Free of Charge

Open data shall be made available for all free of charge.

Principle 7: Open Data Licensing in KSA

Open data shall be subject to a license providing the legal basis for open data usage while defining the conditions, obligations, and restrictions applicable to the user. Any usage of open data shall indicate acceptance of the license terms.

Principle 8: Improved Governance and Citizen Engagement

Open data shall enable data access and engagement for all, reinforce the transparency and accountability of public entities, and support the process of decision-making and provision of public services.

Principle 9: Inclusive Development and Innovation

Entities shall play an active role in promoting the reuse of open data and providing the necessary supporting resources and expertise. These entities shall, in conjunction with the relevant stakeholders, seek to empower a future generation of open data innovators and engaging individuals, organizations, and the general public in unlocking the value of open data.

5.3 Public Data Valuation for Defining Open Datasets

The data valuation process to enable the publication of open datasets at scale passes through several main phases as follows:

Step 1: Identifying Data and Public Information

To assess data value, a public entity shall classify data (in line with the Data Classification Policy) and shall identify all “publicly” classified datasets that may be composed of files, tables or specific records in a database, etc. Afterwards, the benefits, applications, and potential uses for every dataset shall be defined. It is possible to consider the data domain or sector when analyzing potential use cases; for example, GIS data can be used to benefit the health sector. In addition, it is possible to take data sources into consideration: data collected from users directly; data automatically collected through recorded events such as electronic transactions; aggregated data, or data developed from combining data, etc.

Step 2: Assessment of Data Value

After identifying the datasets in the previous step, an analysis shall be made of the main factors related to data usefulness which play a critical role in assessing its value, such as data completeness, accuracy, consistency, timeliness, restrictions, exclusivity, potential risks of publication, or ability to access and integrate with other data.

Step 3: Identifying Potential Stakeholders

After assessing the data value in the previous step, all potential stakeholders, whether entities or individuals, shall be identified across the entire value chain; for example, it is possible to publish consumer trends to product manufacturers, not only to retail stores. Therefore, it is important to understand the key drivers for stakeholders, such as generating revenues by

developing data products or services for public benefit such as those contributing to improving the quality of life.

After the data valuation process is completed, the open data lifecycle may start as described herebelow.

5.4 General Rules for Open Data

The Open Data Policy shall define general rules and obligations that public entities are required to comply with throughout the open data lifecycle; these include:

- Open data planning
- Open data identification
- Open data publishing
- Open data maintenance
- Open data performance tracking.

Open Data Planning

Public entities shall:

1. Appoint an open data and information access officer at the entity's office with the primary responsibility to support the planning, execution, and reporting of the entity's open data agenda and in compliance with this Policy;
2. Develop an open data plan that shall include the following:
 - Key strategic objectives for open data at the entity level;
 - Identification and prioritization of the entity's datasets to be published on the National Open Data Portal;
 - Open data key performance indicators (KPIs) and targets for the entity;
 - Prioritization methodology and criteria;
 - Training needs related to open data; and
 - Timelines for open data publication and maintenance.

3. Develop and document the processes required throughout the open data lifecycle, including, but not limited to:

- Processes to identify public datasets to be published by the public entity;
- Processes to validate and systematically review the compliance of open data with the requirements for information security, personal data privacy, and data quality and to immediately address any identified concerns;
- Processes to ensure that datasets are published and maintained to their appropriate format, timeliness, comprehensiveness, and overall high quality and ensure the exclusion of any restricted data; and
- Processes for gathering feedback, analyzing performance at the entity level, and improving the overall national impact of open data.

4. Ensure that the open data plan is periodically reviewed and maintained;

5. Submit an annual report to NDMO on the open data plan and the progress achieved towards the open data targets as defined in the plan;

6. Conduct training courses related to open data with the support of NDMO or in coordination therewith;

7. Launch awareness-raising campaigns to ensure that potential users are aware of the availability, nature, and quality of the open data published by the entity.

Open Data Identification

Public entities shall:

1. Regularly identify all data classified as “Public” and evaluate the priority for publication as open data of each dataset identified;

2. Assess the value and priority for publication of a dataset immediately upon receiving a request for publication, or whenever a previously restricted dataset is declassified as Restricted and reclassified as public;
3. Record and publish the metadata for the identified open datasets;
4. Consider whether the combination of any publicly available datasets would result in raising the data classification level to protected data, as per the guidelines issued by NDMO in this respect.

Open Data Publishing

Public entities shall:

1. Publish their open datasets on the official National Open Data Portal;
2. Ensure that data is published in discoverable, well-structured, machine-readable, non-proprietary, standardized data formats, including, but not limited to: CSV, JSON, XML, and RDF. The dataset files shall be accompanied by documentation related to the format and instructions on how to use them; and
3. Provide data in multiple formats whenever possible.

Open Data Maintenance

Public entities shall:

1. Ensure that all published open datasets are updated regularly as per the frequency mechanism defined in the metadata;
2. Perform continuous review of the published open datasets to ensure that they meet defined regulatory requirements;
3. Ensure that metadata is updated and maintained, especially whenever the data elements of the published open datasets change;
4. Maintain data traceability by documenting data sources and maintaining dataset version history;

5. Publish open datasets, along with defining and documenting quality-related restrictions in the Metadata.

Open Data Performance Tracking

Public entities shall:

1. Analyze the demand and usage of open data to understand public demand and reprioritize datasets accordingly;
2. Collect, analyze and timely respond to users' requests received directly or through the National Open Data Portal for the publishing of additional datasets.

5.5 Roles and Responsibilities

The Open Data Policy shall define the following roles and responsibilities both at the national and entity levels.

At the National Level

1. NDMO

NDMO, in its capacity as responsible for overseeing open data initiatives in the Kingdom, shall coordinate all open data initiatives and activities at the national level. It shall determine the strategic orientation of open data in the Kingdom and shall develop the national regulations, standards, and procedures to ensure that open data is effectively managed and published across the Kingdom and that it achieves the intended targets.

As such, NDMO's responsibilities shall include:

- **Prepare and review the Open Data Policy:** Draft and update this Open Data Policy and revise it on a periodical basis to consider the potential changes affecting the open data lifecycle.

- **Develop a plan for adopting the Open Data Policy:** Provide continuous guidance to public entities to enable the approval and implementation of this Policy.
- **Open data Consultations:** Support public entities to comply with this Policy and answer any queries related to determining, updating and publishing Open data.
- **Measurement of Compliance with Open Data Requirements:** Measure the compliance of entities on a periodic basis pursuant to the defined compliance mechanism (For further details, please refer to the “Compliance” section) and verify open data initiatives and activities when required.
- **Open Data Education and Awareness:** Launch and monitor communication and training initiatives to raise awareness of open data and approve same at the national level.
- **Open Data Consolidation:** Review the list of available open datasets at the national level and prepare a list of such datasets to indicate their progress.
- **Open Data Performance:** Analyze open data usage and impact at the national level, and create improvement opportunities to be communicated to the relevant stakeholders.
- **Preparation and Review of Open Data Licensing:** A license that allows users to share, modify and use open data.

2. National Information Center (NIC)

The National Information Center (NIC) serves as the technical operator of the National Open Data Portal, including the design, building, operation and maintenance of the platform.

As such, NIC's responsibilities shall include:

- **Develop, Manage and Operate the National Open Data Portal:** Design, build, and maintain the National Open Data Portal to ensure that entities can publish, manage, and update their open datasets.
- **Authorize Portal Participation and Prepare Manuals:** Authorize public entities and ensure that they have appropriate access to the National Open Data Portal, as well as prepare operational and technical guidelines for publishing and updating open data on the National Open Data Portal.
- **Record Portal Usage Statistics:** Capture usage trends and statistics for the published open data and provide same to NDMO and public entities.

At the Entity Level

All public entities shall have the primary responsibility for ensuring that their open data is published in compliance with the Open data Policy. As such, these entities shall appoint individuals to be responsible for carrying out the open data activities as outlined below.

The main responsibility for the open data activities within the entity shall lie with both the Director of the Entity's Office and the Open Data and Information Access Officer (ODIAO).

Head of the Entity: The Head of the Entity – or his designee – shall be held accountable for the open data practices within the entity, and his responsibilities shall include:

- **Approval of Open Data Plan:** Approve and oversee the implementation of the entity's open data plan.

- **Assignment of Open Data Roles:** Assign the different roles related to open data.
- **Approval of Open Data Annual Report:** Approve the open data annual report prepared by the Director of the Entity's Office.

Director of the Entity's Office: He shall be deemed as the strategic lead of the open data operations; his duties and responsibilities shall include the following:

- **Open Data Strategic Planning:** Oversee the development of the open data plan and submit same to the head of the entity, as well as review open data performance to identify and employ improvement opportunities in the open data plan.
- **Open Data Supervision:** Review the open data identification and prioritization activities, approve open data publication, and ensure open data maintenance activities are being performed.
- **Open Data Compliance:** Ensure the compliance of the entity's open data activities with the national data policies, including, but not limited to, data classification, protection of personal data privacy, and freedom of information.
- **Coordination with NDMO:** The Director of the Entity's Office shall serve as the first point of contact between the entity and NDMO vis-à-vis open data. He shall resolve any pending issues related to open data within the entity and shall refer such issues to NDMO whenever necessary.

Open Data and Information Access Officer (ODIAO). He shall be is the operational lead of open data within the entity; his duties and responsibilities shall include the following:

- **Open Data Planning:** Develop the open data plan, including the open data prioritization methodology, and set targets and KPIs to be agreed on with the Director of the Entity's Office and the Head of the Entity.
- **Open Data Management:** Manage open data activities within the entity, particularly the following:
 - Identification of open data;
 - Prioritization of dataset publication;
 - Preparation of datasets for publication and documentation of metadata;
 - Publication of open datasets on the National Open Data Portal; and
 - Updating and maintaining published datasets, and reviewing their quality.
- **Collection of Open Data Requests:** Review open data feedback relevant to the entity and record and analyze requests to publish specific data as open.
- **Open Data Education and Awareness:** Educate and raise the awareness of the entity's employees with regard to open data and support national awareness-raising campaigns, in coordination with the Director of the Entity's Office.
- **Coordination with NDMO (at a secondary level):** He shall serve as the secondary point of contact between the entity and NDMO.

Business Data Executive: The Business Data Executive shall undertake the following responsibilities:

- **Endorse the Open Data Plan:** Contribute to the development of the open data plan and manage the teams in charge of plan implementation, in coordination with the ODIAO.

- **Open Data Prioritization:** Advise the ODIAO on the value of public datasets and the investments required to publish and update same.
- **Review and Approval of Datasets:** Review and approve datasets to ensure that they meet the specifications prescribed in the Regulations in terms of quality and completeness, and document metadata before its submission for publication.

Business Data Steward: The Business Data Steward shall be considered a member of the Business Data Executive's team responsible for:

- **Identification of Open Datasets:** The Business Data Steward shall systematically review and identify the data created and processed by his department and shall classify such as public data where necessary.
- **Preparation of Open Datasets:** Prepare the open datasets to be published to meet the specifications prescribed in the Regulations in terms of quality, completeness, and document metadata before its submission for publication.
- **Maintenance of Open Datasets:** Update and maintain published open datasets and related metadata.

5.6 Compliance

NDMO, in its capacity as the national regulator of data, shall monitor compliance with the Open Data Policy with the support of the Regulatory Authorities.

Compliance Terms

1. All public entities shall abide by the Open Data Policy and shall submit an annual report to NDMO including, but not limited to, the following:

- The level of progress and achievement realized by the entity as per its defined plan;

- The targets and KPIs set in the open data plan;
- The number of open datasets identified; and
- The number of open datasets published.

2. The Regulatory Authorities shall – in coordination with NDMO – develop the mechanisms, procedures, and controls required to resolve open data disputes pursuant to a specified timeframe and in accordance with the organizational hierarchy.

3. NDMO shall review the annual reports submitted by public entities with regard to their general compliance with the Open Data Policy and shall share such reports with the relevant entities.

4. NDMO shall conduct periodic or ad-hoc audits to ensure the compliance of any public entity and shall review the decisions to publish or refuse to publish data to conduct any required procedure in this respect.

Response to Cases of Non-compliance

When addressing cases of non-compliance, NDMO shall adopt a gradual approach to analyze the reasons for non-compliance and the severe impacts and risks resulting therefrom. Accordingly, NDMO shall respond to such cases in light of the three following levels:

- **Awareness-Raising:** NDMO shall focus on awareness-raising when dealing with accidental or non-intentional cases of non-compliance with minor negative impacts.
- **Co-operation:** NDMO shall co-operate with the public entity to prevent, deter, or address non-compliance cases with moderate negative impacts resulting from negligence or non-conformity with the provisions and rules of this Policy.

- **Direct Intervention:** NDMO shall investigate ongoing, recurring or intentional non-compliance cases or those with severe negative impacts and shall make the necessary decisions that are commensurate with the size and nature of such negative impacts.

