

# **The National Data Sharing Policy of the Government of Ghana**

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Ministry of Communications of the Government of Ghana

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## ABBREVIATIONS

CSO	Civil Society Organisation
DPC	Data Protection Commission
GODI	Ghana Open Data Initiative
GSS	Ghana Statistical Service
ICT	Information and Communication Technology
MDA	ministry, department or agency
MoC	Ministry of Communications
MoE	Ministry of Education
MOE	Ministry of Energy
MoF	Ministry of Finance
MoFA	Ministry of Food and Agriculture
MoH	Ministry of Health
Mol	Ministry of Information
MoME	Ministry of Monitoring and Evaluation
NDPC	National Development Planning Commission
NITA	National Information Technology Agency
ODRA	Open Data Readiness Assessment
OGP	Open Government Partnership
PSRS	Public Sector Reform Secretariat

## GLOSSARY

TERM	DEFINITION
<b>API</b>	Application programming interface. An API is a set of subroutine definitions, communication protocols, and tools for enabling communication between various components in a computer system or network. In the context of this policy, an API can enable automated sharing of data stored on different platforms in real-time. An API allows open data to be reused reliably and with minimal effort by developers and businesses.
<b>Capacity</b>	Capacity is understood as the process of enhancing the capabilities of individuals by training them to improve their skills and knowledge, and also by providing the necessary resources (including funds, tools, infrastructure) to sustain and support the application of the skills and knowledge acquired.
<b>Data</b>	Known or assumed facts about something that can be used in calculating, reasoning, or planning.
<b>Datasets</b>	A collection of conceptually related data that are composed of separate elements but can be manipulated as a unit. By implication, the release of new data for the same element in the previous version of the dataset does not constitute a new dataset. For example, releasing the latest year's primary school enrolments is not a new dataset because all previous years' enrolment data can be combined into a single dataset.
<b>Data Exchange Hub</b>	A central digital repository to allow for the deposit, indexing, processing and sharing of government data amongst government institutions according to policies and agreed upon schedules.
<b>Data standards</b>	Frameworks or methods for capturing data that provide agreed upon and consistent structure to collect, manipulate and use data.
<b>Government data</b>	Data produced or commissioned by a government institution.
<b>Information</b>	Data that have been organised and communicated. <sup>1</sup>
<b>Machine readable</b>	Data in a format that can be read and processed automatically by a computer such as CSV, JSON, and XML.
<b>MDA: ministry, department or agency of the Government of Ghana</b>	All ministries, departments, commissions or any other permanent or semi-permanent organisational structure, including public agencies, state-owned companies and organs of the state, established by the government and that have been given the responsibility to perform a public function under the auspices of the Government of Ghana. "Ministry, department or agency" will also include all third parties contracted by government for the delivery of public services.
<b>Metadata</b>	The information that describes the data source and the time, place, and conditions under which the data were created. Metadata informs the user of who, when, what, where, why, and how data were generated. Metadata allows the data to be traced to a known origin and level of quality.
<b>Open data</b>	Data in a machine-readable format that is publicly available under an open license that ensures it can be freely used, reused and redistributed by anyone for any purpose.
<b>Open Data Portal</b>	A web-based platform that aggregates the open data catalogue for government agencies and which the public can access without restriction.
<b>Restricted data</b>	Data that if made publicly available is likely to put individuals, organisations or the state itself at risk of harm or injury, and as defined in various Acts and rules of the Government. Restricted data are consequently only made available on request, if at all, and under restrictive re-use conditions determined by the data owner.
<b>Shareable data</b>	Those data not covered under the scope of restricted data and that for reasons determined by the data owner cannot be made openly available to the public but that can be shared within government.

<sup>1</sup> Porat M (1977) *The Information Economy: Definition and Measurement*. Washington DC: Office of Telecommunications, US Department of Commerce.

# 1. PREAMBLE

The Government of Ghana has already taken steps to support and promote the sharing of government data by launching two initiatives, namely, the Ghana Open Data Initiative (GODI) and the Ghana Data Exchange Hub.

Access to government data in a machine-readable format to enable the use of data made possible by these initiatives and the absence of harmonised regulations, procedures and strategies to manage and release government data, calls for a comprehensive policy that will guide government ministries, departments and agencies in sharing government data. Aided by the advancement of ICT, such a government data sharing policy will provide directives, guidelines and uniformity in implementing national government data sharing initiatives in Ghana.

Further, a government data-sharing policy must provide a clear and detailed monitoring and evaluation framework that will help to measure and evaluate the implementation of the policy, detect specific issues and design appropriate contingency plans to address them.

The end-goal of a government data-sharing policy should be that all government ministries, departments and agencies must be aware of the specificities of the government's data sharing initiative, and understand the requirements, guidelines and processes to share government data. Due care must be taken to ensure that such ministries, departments and agencies must also acquire the appropriate capacities both at the management and the technical levels to implement and embed the required change towards greater sharing of government data across the national data ecosystem.

The sponsor of the Ghana National Data Sharing Policy is the Ministry of Communications and the intended primary audience of this policy are all government ministries, departments and agencies.

## **2. VISION AND MISSION OF THE POLICY**

### **2.1 The need for a data sharing policy**

Evidence-based planning to steer socio-economic development relies on quality data. There is a general need to facilitate the sharing and use of the large amount of data generated and stored by the Government of Ghana.

The value of data for improved governance and socio-economic advancement calls for a policy to leverage these data assets. The current regime of data management does not enable sharing of Government-owned data within government nor does it expect proactive disclosure of shareable data. Such regimes could lead to duplication of efforts and the loss of efficiency in planning activities focused on national development. Efficient and open sharing of government data among data owners and with the public, calls for data standards, interoperable systems, clear and unambiguous guidelines to inform practice, and incentives and resources to ensure sustained data sharing practice in government.

Moreover, the absence of freedom of information legislation calls for a policy that will provide guidance on the proactive disclosure of government data.

Hence, the National Data Sharing Policy aims to enable proactive sharing and greater access to data generated and commissioned by the ministries, departments and agencies of the Government of Ghana.

### **2.2 Vision**

Data for all of Ghana by 2020.

### **2.3 Mission**

To put in place an enabling environment for the sharing and use of government data for socio-economic development.

## **3. POLICY PRINCIPLES**

### **3.1 Specificity**

The policy will seek to avoid general and vague statements of principle that leave room for interpretation and non-action. In other words, the policy will strive to be precise and clear to ensure that the policy guidelines are consistently and uniformly implemented across government. The policy should, inter alia, be specific on matters of documentation, metadata, standards, publication frequency, datasets, data formats, granularity, and interoperability.

### **3.2 Accountability**

The data sharing policy shall include mechanisms that hold government entities accountable in terms of data sharing practice as set out in the policy guidelines. It should also be clear and unambiguous in terms of specifying to whom government ministries and agencies are accountable for publishing and sharing government data. Accountability should favour the active disclosure of data.

### **3.3 Alignment**

The data sharing policy will be cognizant of existing legislation pertaining to the publication of and access to data and information in Ghana. In particular, the policy should be in harmony with the Data Protection Act of 2012 (Act 843), the Electronic Transactions Act of 2008 (Act 772), and the Constitution of the Republic of Ghana. Where possible, the policy should provide greater detail to supplement existing legislation to ensure a policy that is both specific and ensures accountability as detailed above. The National Data Sharing Policy should also be sensitive to and resolve any potential conflict with specific policies on data sharing and use that may pertain at the government ministry or agency level.

### **3.4 Accessibility**

Government data should be easily discoverable, accessible and made available without unnecessary bureaucratic or administrative barriers which may deter data users from using government data. The preference is for data to be openly accessible to all. Data will be published timeously in machine-readable formats as raw or disaggregated data under an open license subject only to considerations of state security and individuals' rights to privacy and safety. Where sharing takes place between government institutions, the data shall be in formats that allow for the integration of the data into other databases and information management systems.



## 4. POLICY OBJECTIVES

1. To realise the potential contribution of government data to sustainable and equitable development through improved governance.
2. To provide government departments and agencies with clear guidelines on how to implement and sustain the publication and sharing of data, both within government and with the public.
3. To formalise the government's long-term commitment to publish and share government data.
4. To provide stakeholders external to the government with assurance of the government's ongoing commitment to publishing and sharing data, and to provide clarity on the government's strategy for institutionalising data sharing across all public institutions.
5. To establish, enhance and support the capacity of public institutions to publish and manage the sharing of government data.
6. To ensure access to and use of government data by all stakeholders.
7. To ensure the quality, relevance, and usability of government data published by public institutions.
8. To put in place an institutional framework to facilitate the publication and sharing of government data.
9. To enhance the policy and legal frameworks for the implementation of the Ghana Open Data Initiative and the Data Exchange Hub.

## 5. POLICY SCOPE

1. The policy applies to all ministries, departments, agencies, commissions or any other permanent or semi-permanent organisational structure, including public agencies, state-owned companies and organs of the state, established by the Government of Ghana and that have been given the responsibility to perform a public function under the auspices of the Government. The policy also applies to all parties contracted by government for the delivery of public services.
2. The policy applies to all government data in line with principles of open by default and published at the most granular level without contravening the provisions of the Data Protection Act of 2012. The provisions of the Data Protection Act notwithstanding, exceptions to the principle of open by default are permitted. In the case of such exceptions, data may be classified as “restricted data”. “Restricted data” are data that for reasons of privacy or security are either only made available on request and under restrictive re-use conditions determined by the data custodian, or not available at all for use by anyone other than the data custodian. Those data not covered under the scope of restricted data and that for reasons determined by the data owner cannot be made openly available to the public but that can be shared within government will be regarded as “shareable data”. Data classified as “restricted” or “shareable” or “open” must be listed as such in the Data Inventory along with a justification for the classification applied.
3. Open by default implies that all data is published timeously and in its most granular form. If data is not published at the most granular level or if the publication of data are delayed, then an explanation as to why the delayed publication is required and/or why fully disaggregated data cannot be made public must be provided in the Data Inventory.
4. All public contracts and the data they generate are included in the scope of this policy.

## 6. POLICY STATEMENTS

### 6.1 Implementation and Governance

#### 6.1.1 Policy Issue

Implementation of a data sharing initiative requires a governance framework that is clear and unambiguous. Implementation requires coordination and the requisite legal and policy mandates, resources and expertise to oversee, steer and coordinate the various stakeholders with an interest in promoting the sharing of government data.

Government institutions such as the Ministry of Communications, the Ghana Statistical Service and the National Development Planning Commission all have different mandates and priorities when it comes to publishing and sharing data. However, there is no overall lead institution with a clearly defined policy mandate to implement the National Open Data Initiative or to oversee the sharing of government data between government ministries, departments and agencies. Historically, however, it has been the National IT Agency (NITA) in the Ministry of Communications that has taken on the responsibility of promoting and developing government open data and other data sharing initiatives. Therefore, with the Ministry of Communication's oversight responsibility of NITA and the Minister of Communications' responsibility for classifying critical databases, the ministerial level responsibility is best placed in that ministry.

#### 6.1.2 Policy Objective

To establish a governance framework for the sharing of government data, including the implementation of the National Open Data Initiative.

#### 6.1.3 Policy Statements

The implementation of this policy will be governed by the government agency responsible for the implementation of the policy, supported by a steering committee to oversee the designation of data sharing criteria, the establishment of standards and procedures for the publication of open and shareable government data, the monitoring and evaluation of the implementation of this policy, and any other tasks as set out in this policy. The steering committee shall be assisted in the execution of its mandate by:

- (i) the Open Government Partnership Steering Committee of Ghana to represent the interests of non-government stakeholders; and
- (ii) Data Task Teams located in selected departments and agencies to support and institutionalise the publication, sharing and use of government data.

A. The Ministry of Communications of the Government of Ghana, shall:

1. Appoint a Data Sharing Steering Committee to steer the implementation of the National Data Sharing Policy across all government MDAs. The Committee shall be established in consultation with the Executive in line with the data priorities of the government and may include (a) invited member-institutions of the Open Data Policy Committee (listed under Annexure A), (b) representatives of the National IT Agency (NITA), (c) a representative of the Data Task Teams, and (d) a representative of each of the following MDAs:
  - a. the Data Protection Commission;

- b. the Ministry of Justice and Attorney-General's Department;
- c. Public Records and Archive Division (PRAAD);
- d. The Open Government Partnership Steering Committee.

B. The Ministry of Communications of the Government of Ghana, through its agency, the **National IT Agency (NITA)**, shall:

1. Assume responsibility for the successful implementation of this policy and of Ghana's National Open Data Initiative and Data Exchange Hub project, both of which are critical components of the government's commitment to improved sharing of government data.
2. Chair the Data Sharing Steering Committee.
3. Commit to continuous awareness-raising and engagement with government ministries and departments, citizens, civil society organisations, higher education institutions, the private sector and other stakeholders on the value of sharing government data.
4. Identify, secure and provide the financial and human resources required to support the sharing of government through the implementation of the Ghana Open Data Initiative and the establishment of the Government Data Exchange.

C. The **Data Sharing Steering Committee** shall

1. Establish and review standards and procedures for the publication and sharing of government data by the Government of Ghana.
2. Adhere to the principle of open government data by default with the exception of:
  - a. Restricted data – Data not accessible or only accessible through a prescribed process of registration and authorisation by respective departments/organisations.
  - b. Shareable data – Data not covered under the scope of restricted data and that for reasons determined by the data owner cannot be made openly available to the public but that can be shared *within* government under clearly defined criteria.
3. Create a Data Inventory that will allow each MDA to record in digital format all data held by the MDA, including a short description of each dataset, the frequency of data collection, the granularity of the dataset, and its status as restricted, shareable or open.
4. Ensure the updating of the Data Inventory by each MDA on an annual basis.
5. Develop and share with MDAs the profile of the Data Task Teams that will assist them to publish and share government data.
6. Draft and circulate a Government Data Sharing Directive within 3 (three) months of the appointment of the Data Sharing Steering Committee. The Directive shall:
  - a. stipulate data standards, licenses, formats, and metadata to be applied to the publication of data by the Government of Ghana.
  - b. provide instructions to MDAs on how to complete the Data Inventory, including how to classify and provide justifications for any government data that cannot be published as open data or that can be published but not according to the standards set by the Committee.
  - c. provide instruction on how to publish or share data via the Data Exchange Hub.
  - d. provide instructions on how to publish data to the National Open Data Portal.
7. Check and approve the classifications and justifications of data as "open", "restricted"

or “shareable” provided by MDAs in their Data Inventories. In cases where the Data Sharing Steering Committee disagrees with the classification of data as restricted or shareable, the Committee will take up the matter with the MDA concerned. If the Data Sharing Steering Committee remains dissatisfied with the explanations provided and determines that it has after repeated engagement with the MDA concerned exhausted all reasonable processes to resolve a disagreement relating the classification of data, the Committee shall exercise its legal mandate to exercise a final and binding classification of the data. MDA’s will have the right to appeal to the Minister of Communications.

8. Adjudicate on issues concerning data sharing between MDAs and the conditions under which sharing will take place where such conditions will be set up within the Data Exchange to ensure access by the relevant MDA(s).
9. Monitor and evaluate the implementation of this policy.
10. Meet regularly to execute its functions. Meetings may be more frequent following the establishment of the Committee but will not take place fewer than 4 (four) times in any given calendar year.
11. Be in office for a period of no longer than 4 (four) years to coincide with the political cycle in Ghana.

**D. The Open Government Partnership Steering Committee of Ghana shall**

1. Provide a platform for the non-governmental stakeholders in the government data ecosystem to make recommendations and voice concerns regarding the implementation of the Ghana National Data Sharing Policy.
2. Provide a platform for non-governmental actors to make formal requests for datasets held by the government.
3. Convey in writing to the Data Sharing Steering Committee the recommendations and concerns raised by non-governmental stakeholders, as well as requests for data.
4. Report back to non-government stakeholders the decisions of the Data Sharing Steering Committee.
5. Monitor the implementation of recommendations accepted by the Data Sharing Steering Committee and requests for data approved by the Data Sharing Steering Committee.

**E. Data Task Teams shall**

1. Be the responsibility of individual MDAs.
2. Be appointed by the MDA responsible for its Data Task Team.
3. Consist of one or more people at the discretion of the MDA hosting the Task Team with a preference for the appointment of existing data providers in MDAs (for example, SRIDs, ISRM and/or PMPs).
4. Constitute a network of government data task teams across government.
5. Provide support to the MDAs in which they are hosted by coordinating the publication and sharing of government data on the National Open Data Portal and the Data Exchange Hub.
6. Promote within their respective MDA the use of government data from other MDAs.
7. Assist with the completion and submission of the Data Inventory.
8. Act as a point of contact between MDAs and the National IT Agency (NITA).
9. Report to the Data Sharing Steering Committee at the request of the Committee.

## 6.2 Publication and Sharing of Government Data

### 6.2.1 Policy Issue

Governments produce terabytes of data as part of their governance activities. The value of this data lies locked up if it is not shared and re-used. Therefore, the government as the custodian of such data should make it available and easily accessible in order to facilitate the widest range of users for the widest range of purposes. It is essential that all non-sensitive data be publicly consolidated and published, either via a central portal or via respective institutional mechanisms such as websites or other visible forums.

Government is a complex, multi-tiered organisation and as such there is a multitude of data owners within the organisation. Intra-organisational co-operation and shared knowledge of the activities and assets, including datasets, between departments and agencies cannot be assumed. Ministries, departments and agencies may enjoy autonomy in terms of designing their own systems or adopting standards of operation or may be locked into different historically inherited arrangements and practices. In terms of data, the key data collected may vary in terms of the frequency with which is collected, the methods of collection, and the sensitivity of the data. It is therefore important that data not suitable for public use should be shared between government ministries, departments and agencies to institutionalise the use of data for efficient and effective planning, decision-making, monitoring and evaluation.

Routine use of open and shared data is still relatively new for some government institutions. There is a need to build a pool of human resources and data skills to support the implementation of government data sharing initiatives. Furthermore, the skillsets and roles required are diverse ranging from data scientists, data privacy experts, and application developers. Therefore, there needs to be an ongoing analysis of skills gaps and the development and implementation of appropriate national capacity-building programmes.

### 6.2.2 Policy Objective

To provide clear direction and capacity to all MDAs such that they may meet their obligations to publish government data.

### 6.2.3 Policy Statements

A. The Government of Ghana, through the lead agency, the National IT Agency (NITA) in the Ministry of Communications, shall

1. Maintain the central National Open Data Portal (<http://www.data.gov.gh/>) for the publication of open government data.
2. Create and maintain a central Data Exchange Hub for the internal sharing and use of government data.
3. Define and enforce common standards and APIs. The National IT Agency (NITA) will enforce open policy architecture to support interoperability of data integration systems and software. This will be supported by the adoption of common international best practice, open machine-readable formats.
4. Assess and quantify data knowledge and skills gaps, paying attention to government employees at all levels and focusing not only on the technical skills required to publish open and shareable government data but also on the gaps in knowledge relating to the purpose and value of publishing government data.

5. Provide capacity-building programmes across government, including but not limited to the provision of adequate training, logistics, and resources (financial and human).
6. Identify and support institutional entrepreneurs who are data champions and who are likely to steer the change processes required to institutionalise data sharing.

B. The Data Sharing Steering Committee shall

1. Draft Ghana's National Data Action Plan.
2. Ensure the publication of the Data Inventory on the National Open Data Portal and maintain records and metadata to ensure the exchange of government data via the Data Exchange Hub.
3. Ensure that the publication of government data does not infringe upon the personal rights to privacy of individuals as set out in the Data Protection Act of 2012 or in any other legislation.
4. Assume responsibility for developing, implementing and revising the monitoring and evaluation of the Ghana Open Data Initiative and the Data Exchange Hub.
5. Arbitrate on matters pertaining to the publication of open and shareable data including but not limited to matters such as the classification of data, licensing and data formats.

C. Each MDA of the Government of Ghana shall

1. With regard to the National Open Data Portal:
  - a. Publish on the Open Data Portal at least 2 (two) previously unpublished datasets within one year of the effective date of this policy.
  - b. Update regularly and in accordance with the publication cycle of the data, all data previously published on the portal.
  - c. Publish data online regularly, timeously, in machine-readable formats, and under an open license as per the Data Directive.
2. With regard to other government data portals:
  - a. Publish datasets on a specific open data portal.
  - b. Deploy technical platforms recommended by the Data Sharing Steering Committee to ensure interoperability with the National Open Data Portal as well as with other government data portals.
  - c. Commission or conduct once every financial year a security audit of the specific portal and submit the audit report to the Data Sharing Steering Committee.
  - d. Release data without mandatory registration, allowing users to choose to download data without being required to identify themselves.
3. With regard to the Data Exchange Hub:
  - a. Update regularly and in accordance with the data publication cycle all data previously published on the portal.
  - b. Publish data online regularly, timeously, in machine-readable formats, and under a copyright license as per the Data Directive.
4. Produce an annual Data Activity Plan that shall include, among others, what data will be published, where it will be published and what training and other capacity-building activities are planned.

5. Complete the Data Inventory on an annual basis, including specifying which datasets will not be published (“restricted) for security and privacy reasons, which data will be shared via the Data Exchange Hub (“shareable data”), and which data will be published on the National Open Data Portal (“open data”).
6. Comply with the standards and procedures for data publication as determined from time-to-time by the Data Sharing Steering Committee.
7. Monitor and evaluate their performance in relation to the publication and sharing of government data.

D. The Data Task Teams shall:

1. Coordinate within MDAs the publication and sharing of datasets on the National Open Data Portal and the Data Exchange Hub. The Task Teams will focus on existing datasets that are readily available on the websites of government ministries and agencies, and on executing approved requests for data received by the Data Sharing Steering Committee or by individual MDAs via the Open Data Portal or the Data Exchange Hub.

## 6.3 Data Licensing, Formats and Standards

### 6.3.1 Policy Issue

Committing to an open license to stipulate the terms of government data (re)use is an indicator of a government’s legal commitment to openness. A license also provides data users such as researchers, journalists, and developers with the assurance that they are free to use government data without restriction or fear of recourse. The Government of Ghana has in its OGP commitments indicated its intention to publish open data under a creative commons license.

At the same time, data published on the Data Exchange Hub will need to be protected as the intention of the Exchange is to promote and facilitate the exchange of government data between government ministries, departments and agencies without such institutions being concerned about the use of shared data by unauthorised persons.

### 6.3.2 Policy Objective

To ensure consistency in how government data is published so that data are discoverable, accessible, usable and interoperable.

### 6.3.3 Policy Statements

1. **License:** All open government data will be published under the most recent version of the Open Data Commons Attribution license <https://opendatacommons.org/licenses/by/1.0/>. Shareable government data that is not suitable for public use will be published under a copyright license. Any exceptions require approval by the Data Sharing Steering Committee. Such approval must be sought in writing and must include a clear rationale for the application of a more restrictive license. Approved exceptions will be made available online to the public.
2. **Format:** Government data to be published in machine-readable, structured data in non-proprietary formats such as comma separated values (CSV), JavaScript Object Notation (JSON), Extensible Markup Language (XML) or RDF format. In the case of geospatial data and other data types, suitable open formats should be used (for



example, geoJSON and KML). Wherever possible, the CSV file format should be used for sharing open data as CSV format is simple to understand, highly reusable and machine-readable. In effect, the Directive will require a data publication maturity level of three stars as defined by the 5-Star Deployment Scheme for Open Data.<sup>2</sup>

3. **Timeliness:** Government data will be published according to a prescribed update cycle as indicated in the Data Inventory. The most recently published datasets should not be older than one cycle of update (e.g. if a dataset is updated every month, then the published open version of that dataset should not be older than 2 months).
4. **Metadata:** Published data to be described as per the guidelines of the Data Catalogue Vocabulary (DCAT),<sup>3</sup> which is consistent with the ISO19115 Ghana Modified Metadata Standard of Ghana's National Geospatial Policy.

## 6.4 Quality of Government Data

### 6.4.1 Policy Issue

While the Government of Ghana produces and holds a vast amount of data that are of interest to the public and to various MDAs, often the data are not of acceptable or usable quality. This limits the usefulness of the data and diminishes trust in data published by the Government.

Quality can be understood in purely technical terms in which case issues such as completeness, timeliness, metadata and licensing are relevant considerations. Technical quality is important but does not take into consideration the quality of the data itself in terms of its accuracy. Accuracy refers to the degree to which data correctly describes an object or event being described. Trust in the accuracy of data can be enhanced by providing data users with explanations of variables used and with descriptions of the methods used to collect data and calculate results. The extent to which the data can be assumed to be the authoritative description of an object or event is an additional non-technical quality dimension of data. It is only when data meets these quality requirements that those using the data can rely on the data.

### 6.4.2 Policy Objective

To improve the quality of data captured, processed and published by the Government of Ghana.

### 6.4.3 Policy Statements

A. The Data Sharing Steering Committee shall

1. With the support and guidance of the Ghana Statistical Service provide directives and support to data owners in terms of data collection, management, analysis and archiving.
2. In cases of disagreement between published datasets refer to the Ghana Statistical Service as the sole arbiter of which data are authoritative and/or official.
3. Share with government departments and agencies feedback received from data users related to the quality of open data published on the National Open Data Portal and of shareable data made available via the Data Exchange Hub.

<sup>2</sup> <http://5stardata.info/en/>

<sup>3</sup> <https://www.w3.org/TR/vocab-dcat/>

## 6.5 Feedback and Engagement

### 6.5.1 Policy Issue

Feedback loops between data publishers and data users are critical in ensuring that relevant and usable government data is shared. Communication channels must be in place to allow users of government data to provide feedback on issues that may be impeding their use of government data.

### 6.5.2 Policy Objective

To enhance the use and re-use of data shared by the Government of Ghana.

### 6.5.3 Policy Statements

A. The Data Sharing Steering Committee shall

1. Develop responsive and trackable feedback mechanisms to facilitate communication between publishers and users of open data. This will include:
  - a. Creating communication channels and advertising those channels clearly on the National Open Data Portal and on the Data Exchange Hub.
  - b. Ensuring that feedback on published datasets received via the National Open Data Portal and via the Data Exchange Hub is communicated to MDAs.
  - c. Ensuring the requests for datasets received via the Open Data Portal, the Data Exchange Hub, or via any other communication channel is communicated to the custodian of the dataset as indicated in the Data Inventory.
  - d. Publishing the decisions of the Data Sharing Steering Committee related to requests for government data on the National Open Data Portal and on the Data Exchange Hub.

B. The Open Government Partnership Steering Committee shall

1. Provide feedback to the Data Sharing Steering Committee from non-government stakeholders represented on Open Government Partnership Committee related to the data needs, data quality, or any other matter pertaining to use of open government data.

C. Each MDA of the Government of Ghana shall

1. Respond to comments received by the Data Sharing Steering Committee on data published on the National Open Data Portal and shared via the Data Exchange Hub.

## **6.6 Legal Framework**

### *6.6.1 Policy Issue*

Global experience shows that a comprehensive legal framework and regulatory clarity is essential for the implementation of government data initiatives. Clear and unambiguous policies and laws ensure that public institutions follow consistent principles and guidelines on the release of data, use a standard data license and comply with security, privacy and technical standards with regard to data formats. However, there is currently no specific legislation in Ghana setting out the rules and guidelines on access and re-use of government data. The Right to Information Bill, first drafted in 1999, is yet to pass into law. A Statistics Bill is currently being drafted which will mandate the Statistical Service to, inter alia, harmonise definitions, norms, standards, nomenclatures, methodologies and concepts for statistical production and dissemination by MDAs. The prospect of new legislation related to the sharing of government data introduces uncertainty in the current climate with respect to the reactive and active disclosure of government data, and makes it difficult to harmonise this policy with the provisions of future Acts.

### *6.6.2 Policy Objective*

To strengthen policy and legal framework for the publication of data by the Government of Ghana.

### *6.6.3 Policy Statements*

The policy recognises the existence of other policies (such as the Ghana Integrated ICT for Accelerated Development (ICT4AD) Policy, the Ghana National Geospatial Policy) and legislation, whether final or in draft stage, relevant to the access, use and reuse of government data. This National Data Policy has made all reasonable attempts to harmonise itself with existing policies and legislation.

The policy further recognises that to give effect to the policy objectives and directions given herein, a comprehensive review of the future legal framework will need to be conducted, particularly following the enactment of the Right to Information Bill and the Statistics Bill, and, where appropriate, amendments or revisions will need to be made to this policy to ensure the applicability of the policy and the operability of the government's data sharing initiatives.

## **6.7 Financing Government Data**

### *6.7.1 Policy Issue*

The success of the administration, implementation, and sustainability of the Ghana Open Data Initiative and the Data Exchange Hub depend on the availability of adequate human and financial resources. Currently, respective MDAs cover the costs of any data activity undertaken. The government must release in a timely manner the required budget to meet its stated commitment to the publication and sharing of government data with the financial resources for the implementation of the Ghana Open Data Initiative and the Data Exchange Hub.

### *6.7.2 Policy Objective*

To ensure the availability of funds to facilitate and sustain the National Open Data Initiative and on the Data Exchange Hub.

### 6.7.3 Policy Statements

A. The Government of Ghana, through the lead agency, the National IT Agency (NITA) in the Ministry of Communications, shall

1. Submit budgets that make provision for the costs of implementing and sustaining the National Open Data Initiative and the Data Exchange Hub.
2. Seek funding from within government and from external sources for the full implementation and sustainability of its data sharing initiatives, including funding for the National Open Data Portal, the Data Exchange Hub, and the Data Sharing Steering Committee.

B. Each MDA shall

1. budget for, and source other funds required to implement its obligations as set out in this policy.

## 7. POLICY MONITORING AND EVALUATION FRAMEWORK

The implementation and success of the Ghana government data sharing initiatives and the effects of this policy in contributing to that success will be assessed according to performance against a set of key indicators. Collection of data and measurement against these indicators should be conducted on a bi-annual basis with each government department and agency conducting its own annual evaluation that is submitted to the Data Sharing Steering Committee. In addition, the Data Sharing Steering Committee will monitor implementation on a regular basis at its quarterly meetings.

The Data Sharing Steering Committee will conduct its own annual evaluation and review the evaluations completed by the MDAs. The indicators proposed are set out below. These are an initial set of indicators that are to be revised by the Data Sharing Steering Committee should the need arise.

### 7.1 Department/agency-level Indicators

#### *Data supply*

1. Publication of a data publishing plan -- the name of document + URL
2. Publication of a data inventory - Y/N + URL
3. Number of datasets released on agency website -- the name of dataset + URL
4. Number of datasets released on National Open Data Portal -- the name of dataset + URL
5. Number of datasets released on Data Exchange Hub -- the name of dataset.
6. % datasets released with standardised metadata & documentation
7. % of datasets up to date
8. % of dataset published in open formats
9. % of datasets published with a creative commons license
10. % of data inventory published as open data

#### *Training*

1. Number of people trained at the management level -- attendance registers and/or

certificates

2. Number of data managers trained -- attendance registers and/or certificates
3. Number of technical staff trained -- attendance registers and/or certificates
4. Number and places where training was delivered
5. National and international events attended by key staff -- name and position of staff member + name and date of event

### *Engagement*

1. Number of data requests received -- Portal and Hub statistics
2. Types of data requested -- Portal and Hub statistics [types by tag]
3. Number of data requests answered -- Portal and Hub statistics
4. Number of feedback forms submitted -- Portal and Hub statistics
  - a. Number of instances positive feedback received
  - b. Number of instances negative feedback received
5. Annual number of dataset downloads (cumulative) -- Portal and Hub statistics
6. Annual number of unique users (cumulative) -- Portal and Hub statistics
7. Annual number of downloads [requests] from government agencies (cumulative) -- Portal and Hub statistics
8. Number of meetings of the Data Sharing Steering Committee attended by the Open Government Partnership -- Steering Committee meeting minutes

### *Resources*

1. Description of any resources (human and financial) made available to support the data sharing initiatives -- Dedicated line items in ministerial budget; Official staff appointments
2. Dedicated Data Task Teams in place to oversee data initiative -- Names and positions of Task Team members

### *Data use*

1. Number of documented use cases which clearly illustrate how government data was used to solve a particular problem.

## **7.2 Data Sharing Steering Committee Indicators**

1. Number of agencies mandated to publish data\*
2. Number and % of agencies publishing datasets on the National Open Data Portal\*
3. Number and % of agencies publishing datasets on the Data Exchange Hub\*
4. Number and % of agencies publishing a data inventory
5. Number and % of agencies publishing a data publication plan
6. Number and average % of completion of data publication plan
7. Number and % of agencies with people trained at the management level
8. Number and % of agencies that have trained data managers
9. Number and % of agencies that have trained technical staff
10. Number of data requests received by the Committee\*
11. Number of requests answered by the Committee\*
12. National Open Data Portal:
  - a. Number of API accounts\*
  - b. Number of API hits\*
  - c. Number of applications submitted\*

- d. Number of dataset downloads (cumulative)\*
  - e. Number of unique users (cumulative)\*
  - f. Total number of downloads from government agencies (cumulative)\*
13. Number of meetings of the Data Sharing Steering Committee
14. Number of minuted decisions taken by the Data Sharing Steering Committee
- \* Indicators for monitoring implementation at Data Sharing Steering Committee meetings

**Annexure A: Open Data Policy Committee (as appointed in September 2018)**

Organisation	Name	Designation
Ministry of Monitoring & Evaluation	Raymond Mensah	Monitoring & Evaluation specialist
Ghana Statistical Service	Mark Abuabu-Dadzie	Director of IT GSS
Ghana Revenue Authority	Elizabeth Titi Opare	Assistant Commissioner Electronic & Application
NDPC	Kwame Awuah	Deputy Director, Infrastructure
Ministry of Finance	Kwesi Adu	Chief Economic Officer & Head of Policy Coordination Unit, M&E Div.
Ministry of Agriculture	Dr Simeon Von Salakpi	Dep. Director ICT, National Coordinator of e-Agriculture Programme
Ministry of Education	Anthony Baffoe	Head of IT
Ministry of Fisheries and Aquaculture	Mr Owusu Sekyere Kwasi	Assistant Planning Officer
Ministry of Local Government and Rural Development	Rabbi Kaissim Bakari	Assistant Director HR
National Information Technology Agency	David Gyewu	Ag. Director General
GODI Secretariat	Sandra Dornor	Administrator, GODI Secretariat
e-Transform	Nelson Osae	Project Coordinator
e-Transform	Victor Adadjie	M&E Coordinator
e-Transform	Rebecca Hammond	Procurement Specialist
e-Transform	Eric Akumiah	Data Expert