

# UNLOCKING THE POTENTIAL OF OPEN GOVERNMENT IN AFRICA



Policy, legal and technical requirements  
for open government implementation in Africa



United Nations  
Economic Commission for Africa



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## Acronyms

ATI	Access to Information
FOI	Freedom of Information
OD	Open Data
ODS	Open Data Standards
OG	Open Government
OGD	Open Government Data
OGP	Open Government Partnership
OSS	Open Source Software
PSI	Public Sector Information
TAP	Transparency, Accountability and Participation
TAPI	Transparency, Accountability, Participation and Innovation





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# PART ONE:

## Guidelines on policy legal and technical requirements for open government in Africa

### Executive summary

In 2013, the Economic Commission for Africa (ECA) commissioned a study on the policy, legal and technical requirements for open government in Africa. The aim of this study is to determine how best ECA can assist African countries to improve transparency and unlock social and economic value, given the vast developmental, social and economic gains that have been realized in countries that have moved towards open government, in particular through open government data (OGD) platforms at national and subnational levels. This project focuses on the use of open government and OGD to enhance governance initiatives and improve the social and economic conditions of African citizens.

The study has two facets: a report on the policy, legal and technical requirements for open government in Africa, which provides a description of the requisite environment for the implementation of open government initiatives in African countries, with a focus on social and economic empowerment of African citizens through the provision of OGD; and the development of guidelines, a step-by-step guide for countries wishing to follow best practices for the implementation of open government within a suitable contextual and technological framework.

The guidelines are set out as a practical, simplified document that provides African governments and policymakers, and also those responsible for implementing policy, with advice on how to design and implement open government and OGD initiatives. The guidelines discuss the legal and policy framework that is needed for open government and OGD, along with the technical requirements and the means of

implementing open government in Africa. They also discuss the steps for engaging citizens in an open government initiative. It is hoped that these guidelines will assist African governments in moving towards a truly open government that is responsive, transparent and participatory.

The guidelines are arranged in four thematic chapters, which are further subdivided into sections for ease of reference.

## I. Introductory matters: linking open government and open government data

### A. Understanding the concepts

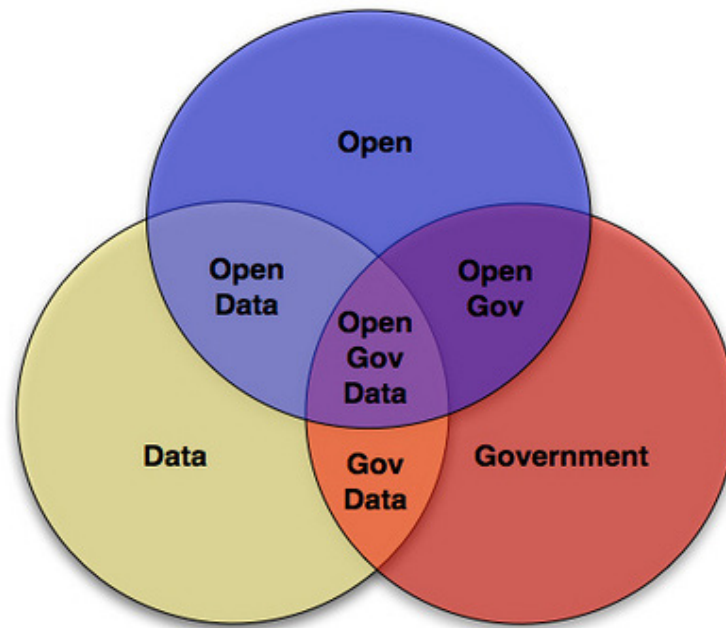
The idea of open government is based on the philosophy that genuine democracy is a participatory process, and that people must have access to the right information if they are to play an effective part in the processes of governance. Open government provides the possibility of access to information and participation in decision making as well as monitoring of government actions.

One of the ways of achieving open government is through a focus on making government data more accessible to citizens. The term “open government data” (OGD) refers to any government-produced or government-commissioned data that are freely available and publicly accessible. Public datasets include those of a business, legal, economic, social, geographical, environmental and other nature. The OGD system involves the use of technology to provide unrestricted access to government data. It does not automatically promote open government but it can facilitate it. Furthermore, while OGD is a component of open data, not all open data are derived from government sources: OGD refers specifically to open data that are provided by governments.

Some important terms in this regard are:

- Open government: a government that focuses on promoting transparency, accountability and participation as its core objectives, thus providing

## ODG Venn diagram



Source: [www.flickr.com/photos/notbrucelee/5512318395/](http://www.flickr.com/photos/notbrucelee/5512318395/).

practical approaches to enhancing good governance and democratic principles.

- Open data: data that are freely available, accessible, machine-readable and openly licensed.
- Government data: data that are produced, stored and provided by government or public sector institutions. They may also be referred to as public sector information.
- Open government data (OGD): government data that are made freely available, widely accessible, machine-readable, and openly licensed in an effort to promote transparency, accountability, participation, and innovation.

As a result of the introduction of new technologies over the past two decades, the idea of OD has spread rapidly and the provision of data in open forms is a phenomenon that exists beyond the specific domain of governance. Accordingly, OGD is more than a means of political development, but is relevant also to the promotion of social,

cultural and economic development.

A distinction should be made between e-government and OGD. E-government concerns the use of information and communications technology (ICT) for better service delivery and exchange of information between the government and citizens, while OGD concerns the provision of government data in open formats, thus allowing for increased access to, and use of, these data by citizens. OGD is not concerned with service delivery, although it has the potential to enhance innovation in public service delivery.

Governments must be aware that they can use OGD to foster comprehensive development in their countries, which includes promotion of open government objectives.

### B. Interconnected objectives

The idea of OGD rests on the rubric of “openness”, which means that the provision of government data should become integral to public sector

engagement with citizens so that it helps to ensure transparency of government information, activities and processes; accountability towards citizens; participation by citizens in governance; and innovative use of data.

In addition to the above objectives promoted by OGD, openness also refers to the manner in which the data are made available. It should be cost-free (or available at negligible cost); accessible (without restriction to certain groups of people); machine-readable (so that it can be widely disseminated through different technologies); and openly licensed (so that users can work with the data in different ways without violating copyright and related laws).

The objectives of open government are expected to play out in ways that provide practical policy-related benefits through their achievement: transparency is ensured through what may be referred to as the “liquidity” of government data, enabling citizens to hold their governments accountable based on the content of such data, which in turn empowers the people to participate more actively in the affairs of government. In the final analysis, open government leads to an improvement in the quality of governance, because transparency, accountability, and participation facilitate the evolution of strategic partnerships within the government, across tiers of government, and between government and private institutions. In addition, OGD allows citizens to use this data within and beyond the political domain in ways that are innovative and can lead to development in other spheres.

Hence, OGD covers the open government objectives and also the additional objective of innovation and it encourages governments to allow citizens to use data in ways that promote economic, social, cultural, and political development. It should be noted, however, that there could be open government without OGD, in situations that do not involve the provision of data, particularly open data. It is also possible, but unlikely, for there to be OGD without open government in situations where OGD focuses on the provision of data that does not promote the objectives of transparency, accountability and participation. It may therefore safely be assumed that, when there is a clear focus on the objectives

of transparency, accountability and participation, the promotion of OGD would usually promote open government, making OGD an integral element of, and pathway to, open government.

The relationship between open government and OGD can be represented thus:

Some African countries have adopted open government principles, and many African countries have joined the Open Government Partnership (OGP), a global forum for governments committed to promoting prescribed open government initiatives and objectives. OGP was launched in 2011 and aims to provide an international platform for domestic reformers committed to making their governments more open, accountable and responsive to citizens. There are 75 countries participating in OGP, including 12 from Africa: Burkina Faso, Cape Verde, Cote D'Ivoire, Ghana, Kenya, Liberia, Malawi, Nigeria, Sierra Leone, South Africa, Tunisia and the United Republic of Tanzania.

## II. Law, policy and technical requirements

### A. Determining the legal and policy framework

In order to achieve the transparency, accountability and participatory objectives, governments must ensure that they create the right legal and policy environment to foster open government. The enabling environment for such initiatives must promote the transparency, accountability and participation objectives and allow data to be provided ‘openly’ in order to encourage innovation: this requires the introduction of laws and policies that support and promote transparency, accountability and participation in governance.

In addition to the core open government-related legal and policy environment, governments must also introduce laws that facilitate the provision of data and that are liberal enough to promote the set objectives, including innovation.

Some of the basic elements of legal and policy requirements that would foster open government and OGD, include:

- Existence of an open government strategy and action plan
- Relevant open government-related and OGD-related policies and legislation, some of which include freedom of, or access to, information laws, data protection laws and policies, copyright laws, etc.
- Laws and policies on the public declaration of assets and conflict of interest of public officials
- Laws or policies on citizen participation in public budget processes
- Privacy policies and policies on the reuse of information.

It may be noted that a number of international and non-governmental organizations have adopted policy guidelines to guide countries moving towards open government. Although many of them are focused on OGD, they are relevant for countries considering a move towards open government more generally. The Guidelines on Open Government Data for Citizen Engagement (May 2013), issued by the United Nations Department of Economic and Social Affairs and the Division for Public Administration and Development Management, and the Guidelines for Open Data Policies (March, 2014), compiled by the Sunlight Foundation, are among the best known.

## **B. Open government and OGD strategy, policy or action plan**

An action plan is a document that provides a strategic, chronological outline of the different phases of implementation of a government's open government policy. This document is expected to include the following components:

- Specific activities
- Key stakeholders
- Expected outcomes
- Timelines for implementation
- Indicators of progress

- Monitoring and evaluation (usually by stakeholders, which would include citizen groups, the private sector, civil society and non-governmental organizations, and so on).

### **1. Functions of the strategy document**

A strategy document should set out how to perform the following functions:

- **Managing the complexity of the open government process**

The necessity for an open government strategy or action plan is prompted by the complex nature of implementing open government, which must be done in carefully planned and executed phases and which requires the coordination of several government agencies and the involvement of the private sector and citizens if it is to be successful. This complexity makes it all the more important for the creation of a coherent and comprehensive strategy in the African context.

- **Assigning and determining roles**

An open government strategy will serve the function of determining and assigning roles for open government implementation to the various agencies involved and provide for a coordinating mechanism or agency with overall responsibility for the open government project.

- **Providing clarity on achieving open government**

The strategy will provide clarity on how the country would achieve its open government objectives, including the implementation of OGD. The strategy should also clarify the commitments that the government is making in relation to open government, which may include improving access to information, accountability, civic participation and the use of technology and innovation to promote openness in the public sector.

- **Requiring public consultation and buy-in**

Developing an open government strategy or action plan should be a consultative process, which includes the public sector, businesses, civil society organizations, government officials and private citizens.

## 2. OGD policy as a core component of open government strategy

The strategy may also contain other legal and policy initiatives on issues such as combating corruption, citizen participation, public sector accountability, and OGD.

For instance, by Memorandum M-13-13 of the Office of Management and Budget of the Executive Office of the President, the United States Government launched its “Open Data Policy – Managing Information as an Asset”, which instructs agencies to manage their data and release them to the public in an open, discoverable and usable manner, and requiring them to publish data in machine-readable and open formats.

Similarly, in the United Kingdom of Great Britain and Northern Ireland, the open government policy includes a code of recommended practice for local authorities on data transparency, which mandates local authorities to publish certain open datasets, in order to promote transparency in the government and to enhance accountability to the public.

In Africa, the United Republic of Tanzania has developed an open data strategy, while Ghana is developing a national open data policy. All African countries that are members of OGP are required to develop an action plan that details how those countries will meet the commitments of the Partnership.

Thus, OGD components can, and should, constitute a core part of the open government implementation strategy, especially as open government involves transparency regarding information produced, handled, and stored by governments as well as activities of government, and transparency, accountability and participation can be enhanced by providing data on such activities and making it openly available to the public to access and use.

Nevertheless, the ultimate focus of the open government strategy should not be on the development of a government website for OGD, but on meeting the transparency, accountability and participation principles and providing reusable data. In addition, as will be shown

below, there are certain enabling environments and requirements that must be present in order for OGD to be useful, and governments must ensure that they achieve these before or in the course of developing their open government strategy.

The strategy should be developed after an assessment of the country’s readiness for open government, it should ensure integration of the open government framework with existing laws and policies, and assess the public sector’s ICT infrastructure to determine what investment will be required for open government (and OGD) initiatives.

The core components of an open government strategy are:

- **Country readiness assessment:** A readiness assessment highlights certain critical factors necessary for open government to determine what gaps might need to be plugged prior to commencement of the open government process. Developing the United Nations guidelines, a country readiness assessment should examine in detail and at all levels:
  - a. Political commitment and the will to implement open government principles;
  - b. Public and civil society desire for transparency, accountability and participation principles;
  - c. Existing legal and policy framework to support open government;
  - d. Public sector institutional framework (to determine the best site for open government in the public sector);
  - e. Public sector culture and approach to open government;
  - f. Sustained (and sustainable) financial commitment to open government;

- g. Existing technological infrastructure to determine what modifications OGD may require.

The United Republic of Tanzania is an example of an African country that has conducted a readiness assessment in order to assist the Government in establishing a national open data programme that meets key OGP requirements, in particular to assist the Government in diagnosing what actions it could consider in order to establish an open data initiative. The programme is also intended to be aligned with key national priorities of the Government, and it gives specific attention to the priority sectors of education, water and health. The Tanzanian assessment elucidated requirements for both open government and OGD.

- **Defining stakeholders:** At a macro level, open government stakeholders comprise the public sector, private citizens, civil society and businesses. However, the open government strategy ought to define specific agencies, organizations and individuals that will play a key role in the open government process. These will include national statistics agencies, non-governmental organizations with a key interest in open government and individual change agents, where these exist.
- **Establishing the goals and priorities of open government:** The transparency, accountability and participation objectives of open government can be very broadly defined and so it is necessary for a country to determine the main and actionable priorities for its implementation of open government. The priorities may be determined by the OGP commitments or may be decided based on the country's most pressing social needs.
- **Identifying resources:** A move towards a more open government will have cost implications: in some countries it may require a value and service orientation of the public service, aside from infrastructure and technology changes. Stakeholder management and buy-in, and training and retraining, will need to

be budgeted for, together with human resource requirements.

- **Establishing performance indicators:** African governments will have to set benchmarks and measurable indicators to determine progress and those areas where more resources may be required.
- **Clear definition of actions and responsibilities:** This will ensure that responsible agencies and personalities can be held accountable.

### 3. *Relevant open government and OGD-related policies and legislation*

Information laws and policies usually define the position of a particular government on public and private access to and use, storage and communication of data, including publication and sharing. These laws and policies on the use of information comprise freedom of information laws, data protection laws, open data laws and copyright laws. They will also include laws and policies regarding the safety and security of digitalized information and the use of information for national security purposes. The various kinds of laws and policies are described below:

- **Freedom of information laws**

Currently about 99 countries have promulgated freedom of information laws. In brief, these laws contain regulations that constrain the ability of governments to withhold certain types of information that are publicly produced and held, particularly information that is in the public interest. The laws establish the right of the public to request and receive government-held information and the procedures for doing so.

Freedom of information laws generally define the relationship between public agencies and the users of public information, and they establish guidelines on the process of requesting government-held information and the terms and processes for providing such information. Although there is no hard and fast rule regarding the processes that government agencies and institutions must follow, the following steps are common to all countries with freedom of information laws:



- Applicants seeking to obtain public information may submit a written request to the relevant public agency.
- The recipient agency usually has a limited amount of time to respond to the request. The time should not be too long as timely provision of information is a key indicator of openness.
- Where the request is denied, the recipient agency must provide reasons for the denial.
- In most cases, applicants whose requests are denied may appeal, and this would include access to the courts. Most freedom of information laws designate a data manager or controller of information in government agencies. Freedom of information laws should also be clear on the nature of information that must be made publicly available. Public institutions will usually be exempted from the duty of disclosure where the requested information would obstruct criminal investigations; violate intellectual property or personal privacy; be prejudicial to national economic security or national defence; and be harmful to diplomatic relations, including information in inter-State diplomatic correspondence and memorandums or letters between public agencies that, based on their nature, are confidential. Freedom of information provisions apply to public institutions at all levels and could also apply to political parties, non-governmental organizations and other private institutions, particularly where they perform public functions. This is very important since many public institutions now outsource functions that used to be purely within the remit of public bodies.

It should be noted that freedom of information is considered to be a right that accrues to citizens; therefore, adequately implementing freedom of information laws should be considered a national priority and not just a requirement for open government initiatives. This right finds expression in article 19 of the Universal Declaration of Human Rights, which provides: "Everyone has

the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers."

- **Open data laws**

While freedom of information laws are targeted at ensuring that public data are made available to the public upon request, open data laws should be introduced to ensure that there are legally enforceable rules for making public and private data available to, and accessible by, the public without the need for formal processes. This is usually possible through the use of technology, in particular the Internet.

Open data laws and policies should define government strategy for the release of data under terms that allow access and liberal use. Issues such as technical requirements must be addressed, and also issues relating to the nature of data and data sets, the form in which they will be released, the terms under which they will be released, and the objectives and outcomes expected by the government.

Governments should ensure that they provide proper enlightenment, especially in schools and government ministries, about the usefulness of open data in order to encourage the use and ready release of such data, thus enhancing the objectives of open government and OGD.

In Africa, the United Republic of Tanzania is a classic example of a country that has addressed the legal issues surrounding access to government information, beyond a freedom of information law.

- **Data protection laws**

Data protection laws that protect the private and personal data of individuals should be introduced in African countries in order to ensure that citizens and members of the public are able to use available data within the confines of the law.

Data protection laws should state clearly the terms under which private data can be released and used, and the consequences for the abuse or improper use of data should also be clearly stated.

Public officials should be educated and trained in the need for and nature of such laws so that they can understand how properly to exercise their discretion while handling public sector information and while providing access to such data to members of the public.

These laws are necessary to provide a balance between releasing all data and withholding all data. Data protection laws help define the limits within which data can be released and made open.

- **Copyright laws**

Countries should ensure that the default copyright position (namely, all rights reserved) is not the only option that creators of copyrightable works have for their creations. In particular, public service information should be openly licensed to encourage citizens to access and use it. Countries may develop their own open licenses with varying degrees of openness in relation to the rights that are conferred on users of public works, in particular, but the public must be made aware of the different licenses and their scope of coverage. As far as possible, public service information should be licensed as being in the public domain so that citizens and taxpayers have access to such works and are entitled to use them as they please, within the confines of the law. There should be widespread engagement with members of the public on the different rights that they have and can exercise in relation to openly licensed works, and governments should encourage the use of such works, especially by young people and entrepreneurs, for innovative purposes.

- **Laws and policies on declaration of assets and conflict of interest by public servants**

Once laws are in place to enhance access to information and OGD, the other aspects of open government implementation will easily fall into place, as openness begins with access. Thus, in addition to laws and policies on data, open government implementation involves making sure that certain types of information are made available to the public.

One class of information that will enhance accountability and transparency relates to laws or

policies requiring civil servants and politicians to declare their assets (and liabilities) on assumption of office, at regular intervals (annually, in some jurisdictions), and upon the expiration of their tenure in office or on resignation.

Asset declaration provides up-to-date information on assets such as land, stocks and shares, moveable goods, cash deposits, convertible assets, commercial activities, and the sources of finance for these. In addition, debts and expenses such as educational expenditure are also liable to declaration.

This information may be available under an OGD framework, subject to data protection laws. For that reason, it is necessary to have the right legal and policy framework in place to ensure that citizens' right to access information and the corresponding right to privacy are adequately protected.

In addition, regulation or policies clarifying, requiring declaration of and proscribing conflicts of interest are a necessary component of the transparency and accountability objectives of an open government.

A conflict of interest policy can assist public officials in understanding the nature of relationships and situations that may constitute a conflict of interest. Such a policy is also undergirded by robust requirements on the declaration of assets. Where a conflict of interest exists, the policy usually provides for the declaration of the interest and the recusal of interested officials from participating in decision-making over cases in which they have an interest.

These declarations should not be subject to protection from public access because they are meant to foster openness in government and as such must be accessible and available to citizens and under terms that allow sharing and different kinds of use, such as for research.

- **Laws and policies on citizen participation in the budget process**

Citizen participation in the budget process is an important component of a participatory democracy in which citizens are given a say in the allocation of public funds. This allows citizens to identify, discuss and prioritize public spending

projects, and gives them the power to make real decisions about how taxpayers' money is spent.

Given the accountability objective of open government, it is crucial for a government desiring to be open to ensure public participation in the budget process. This will ensure that citizens are aware of the manner in which public funds are spent and can verify that the stated expenditures are actually executed. In order to ensure public participation in budgeting, governments must establish policies that are clear, widely disseminated and implemented, outlining how citizens can be encouraged to participate in the budgetary process.

An effective budgetary participation policy should provide for public awareness campaigns on budgetary matters; encourage free and unrestricted public access to budgetary information, including appropriation, spending, and expense reports; foster the technological requirements for making budgetary information available as open data; develop expertise within and outside the government to ensure that the data made available can be used effectively to enhance economic governance; encourage public participation in budgetary matters so as to improve accountability in government spending.

Once a policy to this effect has been introduced, it will lay the foundation and establish the enabling environment for laws to be passed to mandate specific standards for government agencies and institutions to follow in order to encourage openness in this area of governance. An example of a law that encourages an open culture in budgetary matters is the United States' Digital Accountability and Transparency Act (DATA) which was passed in 2014 and which seeks to set open standards for government agencies to follow when reporting financial data.

The relevant laws and policies in this regard should also identify and organize public and non-public stakeholders to work together to build participation and collaboration in improving transparency, accountability and participation in government spending. Stakeholders include government agencies and officials, including law makers, non-governmental and civil society organizations, the media, public interest and pressure groups, unions, and businesses, so

as to ensure widespread and comprehensive participation and collaboration.

### Components of the legal and policy framework for open government and OGD

- Relevant data and information laws
- Laws and policies on declaration of assets and conflict of interest in the public sector
- Laws and policies on citizen participation in the budget process
- Copyright licensing framework for OGD

## C. Technical requirements

### 1. Introduction

Perhaps, even before the legal and policy environment are set to establish standards of behaviour and operation in government, the right technical and infrastructural environment must be put in place to ensure effective implementation. Any government wishing to be truly open and to achieve the objectives identified above must ensure that the laws and policies introduced can be implemented and effectively supported by the underlying technical architecture.

Consequently, there are critical technical and infrastructural mechanisms and structures that must be put in place to ensure that open government is significantly achieved through OGD. Basic open government principles and indicators can be achieved by a focus on legal and policy requirements, but in order to ensure that there is significantly widespread and effective achievement of the open government objectives, OGD requirements which include both legal and policy instruments and also technical frameworks must be put in place.

### 2. Technical components for OGD in Africa

The use of the Internet and ICT is the most cost-efficient and effective way of achieving open government, especially since OGD offers an intuitive approach for attaining open government.

There are certain technical requirements that must exist for OGD and hence for efficient open government, which determine the manner in which open data may be obtained and used.

It must be noted, however, that, as discussed in the report, the African realities of low Internet penetration and digital and functional illiteracy may mean that in the short to medium term, the focus on technologically enhanced open government must be accompanied with non-ICT-based open government measures.

Some technical requirements for the attainment of open government are outlined in the following subsections.

#### **a. Portal development**

A data portal is an online collection of data that is freely available to users from a single source or website. The data are arranged into sets based on the content and the portal contains dashboards that provide at-a-glance views of key data indicators, allowing users to determine the different data sets and content of the portal. Data portals are the most common platform for OGD as they provide a single point of entry to all government data, properly arranged, and they usually provide search facilities for ease of use.

Setting up a data portal is one of the easiest ways of providing OGD for open government or any other purpose, and governments that wish to do this do not need to develop their portals from scratch as there are several open-source data portal platforms, which have been developed for the purpose of open government and OGD and have been adopted by many countries around the world. These provide complete solutions for the publishing and retrieval of data.

African countries wishing to set up data portals may follow the following steps:

- Gather the data that is to be published
- Convert the data to machine-readable format (discussed below)
- Arrange the data into data sets
- Identify a suitable data portal platform (or build one from scratch)
- Create a license for the site or use an

open license created by any of the known licensing organizations, such as Creative Commons (discussed below)

- Upload the data.

Once the data portal has been set up, the government will have to update the data regularly to ensure that the information contained in the portal remains current. This is an important indicator of open data and, as such, is an important step to note even when setting up the portal. Several African countries have central data portals set up by their governments as part of their open government implementation. Morocco, Ghana, Kenya and the United Republic of Tanzania are good examples. A comprehensive list of data catalogues in use by governments around the world may be found at [www.datacatalogues.org](http://www.datacatalogues.org).

#### **b. Storage**

Considering the nature of modern government machinery, public data are usually available in large volumes, and as such, the digital data sets to be provided by governments require special tools and software for storage and data management. Data of this kind and the technology used to manage the data are generally referred to as “big data”. The term “big data” generally applies to data sets that are too large and complex to manipulate or interrogate with standard methods or tools.

In order to store such large volumes of data, data centres are created that comprise physical structures built to house large volumes of data. The construction of a modern large-scale data centre, such as those used by information technology and telecommunications companies, requires significant resources and infrastructure such as data connections, uninterrupted electrical power supply, and environment regulators (such as air conditioners or similar temperature regulators).

In order to overcome the infrastructure challenges facing many African countries and set up effective OGD platforms, African governments can, in the short term, rely on technologies such as “cloud storage”, a facility under the system known as “cloud computing”. This is a process that provides significant space for storing big data by providing

virtual space for them, thus eliminating the need for physical data centres. Cloud computing is a generic term for “methods that deliver infrastructure, services, and software via the network on demand, and at scale.... Instead of owning and managing ICT products and services, ... organizations employing cloud computing services can meet their ICT requirements using a flexible, on-demand, and rapidly scalable model requiring neither ownership on their part, nor provision of dedicated resources by the cloud services provider.”<sup>1</sup> Reliance on cloud computing can thus ameliorate many of the challenges that would impede the movement towards the introduction of OGD in Africa. Even, however, with a reliance on cloud computing, data security presents a challenge, for both the public and private sector and any move towards open government, especially where OGD is involved, should ensure that released data do not contain any personally identifiable information which could be used to identify specific individuals and breach their privacy.

In the long term, however, Africa will require its own data centres. There are currently 35 data centres spread across Africa,<sup>2</sup> in Angola (1), Kenya (2), Mauritius (7), Morocco (4), Nigeria (2) and South Africa (19). Compared with the 78 centres in the Middle East alone, this illustrates that the current number of centres falls far short of Africa’s requirements.

Although data centres are generally private concerns, African governments may provide incentives for the establishment of more centres, or enter into partnerships with international providers to establish more centres in Africa.

Technology such as cloud computing can assist in circumventing the infrastructure deficit in many African countries, especially with regard to technological hardware. It also enhances interoperability and archiving and provides new ways of making data available.

### c. Machine readability

This refers to data in a form that a machine can process and it automatically eliminates non-digital material. Since African governments

run their administrations through paper-based activities, providing machine-readable material might pose a challenge to most of the public agencies in these countries. Accordingly, in order to prepare public service information for widespread dissemination as OGD, it is important that all such material be converted to any of the machine-readable formats.

It should also be mentioned here that OGD serves its purpose best when it is based on open standards. Open standards enhance interoperability and ease of use. An open standard as defined by Microsoft is a standard that is royalty-free, while the term “standard” applies to technologies approved by formalized committees that are open to participation by all interested parties and operate on a consensus basis. An open standard is publicly available, and developed, approved and maintained via a collaborative and consensus-driven process. These open standards are requirements that are accepted by the data community as being publicly available and also being free of proprietary or licence restrictions. To give an example of an open standard, the definition provided by the South African Government in its Handbook on Minimum Information Interoperability Standards is reproduced below:

“A standard shall be considered open if it meets all of these criteria...

- It should be maintained by a non-commercial organization.
- Participation in the ongoing development work is based on decision making processes that are open to all interested parties.
- Open access: all may access committee documents, drafts and completed standards free of cost or for a negligible fee.
- It must be possible for everyone to copy, distribute and use the standard free of cost.
- The intellectual rights required to implement the standard (e.g. essential

<sup>1</sup> See: Cloud Computing in the Public Sector: Public Manager’s Guide to Evaluating and Adopting Cloud Computing. White Paper, 2009, Cisco Systems Inc.

<sup>2</sup> See [www.datacentremap.com](http://www.datacentremap.com).

patent claims) are irrevocably available, without any royalties attached.

- There are no reservations regarding reuse of the standard.
- There are multiple implementations of the standard.”

Open standards are relevant to data security technology, exchange of data and metadata (Open Data Foundation) and even in the description of metadata. Much open source software is recognized as acceptable standards that facilitate data adoption and interoperability. The development of open source software and open data standards may rely on partnerships with both public and private institutions such as universities, technology companies and developers. OGD materials must be presented in machine-readable format, so that they can be harnessed, reused and repurposed by commercial and non-commercial entities to increase their value and utility.

#### **d. Information infrastructure**

A move towards open government and OGD implies a coherent approach to assessing and validating all public sector information. To this end, African governments will have to begin to catalogue public sector information that is available at national, regional and subregional levels. This exercise must be followed by an assessment of how existing information is used, how and by whom it is accessed, and a commitment to the continuous updating of existing information. In addition, governments must support public sector organizations in releasing information that has been created. This is known as the information infrastructure.

The development of information infrastructure is a continuous exercise that will have evolving priorities as the infrastructure develops. Governments must also create awareness of what information exists and publish inventories, known as “information asset registers”, of available information in an accessible format. In relation to the information infrastructure, there are three steps that a government may take:

- Identifying and maintaining an inventory of data held by government

- Prioritizing data to be included in the national information infrastructure
- Supporting public institutions to release their data as extensively as possible.

#### **e. Mobile telephony**

Owing to the growing use of mobile technology in Africa, this is one of the ways that information can be disseminated among a significant proportion of the population. It is important for African governments to ensure that any OGD platforms that they create will be available in the form of mobile applications (mobile apps) so that the growing number of mobile phone users in African urban and rural communities will have access to these data, thus encouraging greater and deeper participation among various levels of society. As mobile telephony remains the most accessible technology platform in Africa, it is already relied upon as a medium for the provision of public services. An example may be found in South Africa, where mobile platforms are used to provide services in health and education. Using mobile telephony as a platform for open government thus already has a precedent in Africa.

#### **f. Interoperability**

It may be noted that, in relation to open government and OGD initiatives, interoperability will arise both as a technical issue (i.e., the ability of different government data systems to work together) and as an organizational issue (the ability of different agencies and local or regional and federal governments to cooperate to ensure that data are consistently, seamlessly and coherently presented, retrievable and usable).

Governments must ensure that whatever system they choose for the implementation of OGD is accessible on different technologies and can be used and transferred between different systems, thus increasing its utility and usability.

Enhancing technical interoperability is possible where open data standards are employed and there is a predetermined process for resolving conflicts that may arise.

Enhancing organizational interoperability is possible with a “whole-of-government” approach to open government and OGD. This simply means

that there must be significant coordination and cooperation between the sectors and levels of government, the centralization of service and data delivery. This can be achieved through a decentralized means of providing and storing data, but with a central point of access for citizens and end users. In such cases, interoperability must apply to searches, retrieval and archiving of OGD.

#### **g. Security and data protection**

Data security poses a challenge to the development of any database and in an open government process, the issue becomes how to protect the data from malicious or destructive forces, while maintaining open access to the data. There are different issues that need to be considered: first, protecting personal information through masking or other means; second, ensuring that open data sets cannot be corrupted; third, ensuring the integrity of web portals; and, fourth, risk management of data. The challenges of data security and protection may be ameliorated by ensuring the development of adequate protocols for data security.

#### **h. Data quality and validity**

A major issue that plagues data from African nations is the inability of national or international bodies to gain access to and gather certain types of data, which leads to an overreliance on estimations. The validity and accuracy of data is of course a concern for an open government or OGD initiative, as an assumption that public service information is inaccurate will reduce the willingness of the private sector to use or repurpose the data, to prevent possible legal challenges. Data issues also affect the kinds of data sets that can be released under an open government and OGD initiative. If a government is unable reliably to gather certain data, it cannot release them, or will be unable to release them in bulk, thus limiting the usefulness of the data or the kind of innovation that can be based on such data.

More accurate data from Africa means better policymaking, as decisions are not made based on far-off estimations, but valid representations of the population. Higher-quality data make it easier for governments and development bodies

such as the International Monetary Fund (IMF) and the World Bank to prioritize limited resources in order to bolster economic development.

To improve overall data quality, some policy action will be required. First, the independence of data-gathering bodies in African countries needs to be assured. The process of data formulation must be free from political manipulation. Governments must also, as part of the preliminary stages of planning for open government and as a core part of their open government strategy, provide training for officials and non-government stakeholders who will be expected to gather data and develop the information register. A well-planned and executed information infrastructure would also be useful to ensure that accurate data are made available as part of the open government implementation, thus making transparency meaningful.

The OGD movement is likely to assist in making data more credible in the long term, as more and more people engage with the data and possibly verify it for their purposes. There may be changes as a result of citizens and policymakers demanding better statistics and using them to inform decisions. In the short term, techniques such as the use of mobile phones as a data collection tool can vastly improve the collection of primary data in Africa.

Some key factors that affect data quality include:

- Number of published datasets
- Use of standardized metadata
- Standardized file formats
- Standardized domain categories
- API capabilities
- Curation.

#### Technical requirements for ICT-enabled open government

Portal development

Storage

Machine readability

Information infrastructure

Reliance on mobile telephony

Systems and organizational interoperability

Data security and protection

Data quality and validity

### III. Implementation plan

#### A. Preliminary steps for the government: what comes first?

This section discusses the consecutive first steps that a government wishing to implement open government must take.

##### 1. Identification of stakeholders

Before the commencement of an open government initiative, it is advisable for a government first to identify all the stakeholders in order to clarify and assign their roles and involvement in the project. Early stakeholder adoption and ownership of an open government initiative are critical to its success, and stakeholders within and outside the public sector must be recruited at the onset of the project.

These stakeholders must represent the main pillars of society and be drawn from such domains as civil society; communities; academic bodies (including private research institutions and think tanks); the private sector; the media; key public sector agencies in such area as data collection, government planning, the law, ICT and public economy and finance.

Time and resources must be dedicated to stakeholder engagement and management once the identification is completed. Workshops, forums, town hall meetings and a public awareness campaign using all forms of traditional and digital media should be used in this process.

##### 2. Assessment of country readiness for open government

Before developing an open government strategy or action plan, a government must conduct a country readiness assessment to determine its current level of readiness, state of infrastructure, existing strengths, weaknesses and capacities, and it must identify the gaps, skills and resources required for open government implementation. The readiness report must also clarify the existing capacities of users (citizens, civil society and businesses) to engage with the open government (and OGD) process once implemented. For instance, low broadband penetration in cities will affect the potential impact of OGD. Similarly, if there are more mobile Internet users than fixed line users, then OGD platforms will have to take this into consideration. Some of the indicators for open government assessment as developed by the World Bank are:

- Leadership and political will
- Policy and legal framework
- Institutional structures and responsibilities
- Capacity requirements
- Data within government
- Citizen engagement and demand for open government
- Open data ecosystem
- Financial resources
- National technology and skills infrastructure.

##### 3. Identification of resources

The assessment of country readiness ought to illustrate the resources required for open government and OGD. There are three types of resources that must be identified and their strengths and weaknesses assessed: technological resources; human resources; and, of course, financial resources. In relation to technological resources, the government needs to identify the ICT systems currently in use (for example, those in use for e-government) and determine what may be required for a move to OGD. For human resources, it is imperative for a government to identify the civil servants in every agency who will be responsible for driving open government and OGD initiatives in that agency and for ensuring



compliance with government guidelines on implementation. Identifying financial resources is important for the sustainability of the initiative. It is advised that adequate budgetary provisions be made for open government and OGD projects.

#### 4. Defining the information infrastructure

An essential part of the open government project, especially in relation to OGD, will be to determine the existing public sector information in existence, its completeness, validity and accuracy. An inventory of all public sector information that will be available under the open government project needs to be taken. This inventory will clarify the gaps in the information that might exist and assist data collectors to ensure that complete, valid and accurate data are available. This inventory is known as an “information asset register”. The information asset register should be publicly available and accessible, as this will ensure that stakeholders can provide feedback on the asset register.

Structures must also be put in place to ensure that the information infrastructure is sustainable and can be scaled up, improved upon and updated from time to time, so that the data published remains timely.

#### 5. Articulating the open government strategy

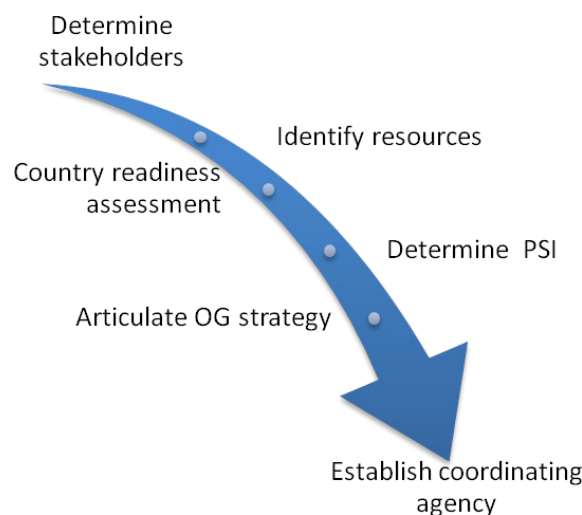
The open government strategy has been described in detail in chapter II, section B, above. As discussed, it is a document that should be

developed in consultation with all stakeholders and should include a summary of the country readiness assessment, as this will determine, to a large extent, what is immediately possible under the open government project and what is aspirational. The open government strategy will also articulate the open government priorities and objectives and this is where the government can provide preliminary justifications and strategies for its implementation of OGD. The strategy should define immediate actions and establish the organizational requirements for the open government project.

#### 6. Organizational structure for open government

Effective open government initiatives must be coherent and this coherence can be achieved by centralizing OGD in one portal, which retrieves its data from underlying searchable data catalogues. Beyond the technical organization of open government, however, structural organizational requirements may include the appointment of a chief information officer or other high-level official with overall responsibility for the government’s digital agenda and also for the open government project. For instance, in the countries which are leading the OGD process, such as the United Kingdom and the United States, expert advisors were hired who effectively championed the OGD projects. The expert will coordinate all the facets of the open government initiative, including the technical, infrastructural and resource aspects.

**Figure 1: Steps to implement open government**



Source: created by Author.

## 7. Opening up data

The process known as “opening up” data is widely recognized as one of the main pathways towards the attainment of open government, given that the OGD system is often seen as value-neutral and does not possess an inherent moral judgment about the transparency or accountability of a government in power. Thus, if the OGD approach is being relied on as one of the paths to open government, the most important issue then becomes how to open data. Guidance in this regard may be found in the Open Data Study,<sup>3</sup> which suggests the following list of questions to be asked before data can be opened:

- What level of data collection is undertaken by the government?
- Are these data collected in a systematic and timely manner?
- Are these data stored digitally or on paper?
- In what format are digitized data collected and stored?
- Are these open or proprietary formats? Are they machine-readable?
- What is the state of e-government activities in the country? Does the government have an e-government strategy? Is it implemented?
- Are government data or the compilation of government data currently protected by copyright or another intellectual property-like regime?
- Are the data subject to any licenses that restrict reuse? Are fees charged for access (for instance, to aid cost recovery)?
- To what extent are conversations around the digitization of government subject to vendor capture?
- What sorts of privacy laws are operational in the country and what impact might they have on open access to government data?

These issues have been raised at various points in the present guidelines but are reproduced here to assist governments to assess their current data collection measures to implement the actual opening of their data. The issues raised

above would have to be addressed prior to the release of government data. This illustrates that open government and OGD measures cannot be rushed and sufficient time must be devoted to the project. One way of not losing traction or interest in open government and OGD, while such back-end issues are being addressed, is to commence the public consultation and awareness programmes. It should be noted that public service information qualifies as OGD if it is legally and technically open, discoverable, and presented raw and in bulk. The term “legally open” means that data are available for both private and commercial use and reuse free of restrictions (and prohibitive pricing) and technically open in the sense that they are available in machine-readable formats. Data also need to be raw and available in bulk (big data).

The term “discovery of data” denotes the ability of data to be easily retrieved. The easiest way to ensure this is for data to be hosted on a central portal, which is fed by several underlying data catalogues.

## 8. African examples

As was mentioned earlier, a number of African countries have joined OGP and have opened data pursuant to commitments made under the Partnership or out of a desire simply to pursue the transparency, accountability and participation principles.

- **Morocco:** Morocco is not a member of OGP, but established the first law on access to information in the Arab world and, by law, it publishes its procurement data and information and also budget information online. It is regarded as having one of the most transparent budgeting processes in the Middle East and North African region. It also launched an open data portal in 2011 as part of the move towards increased openness and transparency in government. At present, the portal hosts non-sensitive public service information such as maps, education, employment, health and financial information.
- **Ghana:** Ghana has been a member of OGP since 2011 and has created an OGP action plan. It enshrines the right

<sup>3</sup> Hogge, B. (2011) Open Data Study New Technologies, London, Transparency and Accountability Initiative. Available from: <https://www.opensocietyfoundations.org/sites/default/files/open-data-study-20110519.pdf>.

to information in its Constitution and has also tabled a freedom of information law before Parliament. There is a large public appetite for transparency and participatory democracy and the country launched its open data portal in 2011, with several hundred data sets. The country is thus one of the most progressive in relation to OGD in Africa.

- **Kenya:** The Kenyan Constitution includes a provision on access to information and also obliges the government to publish important information. Kenya is also a member of OGP and launched an open data portal in 2011 in line with its commitments under the partnership. As in Ghana, the Kenyan data portal contains several hundred data sets and these are set to increase. Despite the strides made in opening up government data, it was recorded that only 14 per cent of Kenyans have access to the portal and that there is widespread ignorance about its existence and utility. Digital illiteracy is militating against full exploitation of the portal by Kenyan citizens.

From the above brief examples, it should be clear that, across the continent, African countries, whether or not they are members of OGP, are committed to increased transparency through the opening of data. It is advocated that this approach should be adopted by all African countries that seek to pursue better governance, more transparency and a participatory democracy.

## 9. Data sets

It is important that, once the assessment of the information infrastructure is complete, the government decides which data sets it wishes initially to make open. The data that are available in the information asset register are of course the first place to start, but it should be borne in mind that this is just a start and more data sets should be added as the system is tested and as public appetite for open data increases and results in demands for specific data. The government should thus be prepared for the eventuality that the opening of data will result in increased calls for non-available data and the public sector

responsibility to collect, collate and open up new data sets. This process reveals how increased participation and innovation can improve transparency and accountability.

Below is a list of key data sets that may be considered for initial release:

- Parliamentary records and data
- Legislation and proposed legislation
- National statistical information (social, economic and demographic data)
- Election results (federal and regional)
- Government budget (high-level and transactional)
- Government procurement information (local, regional and national; high-value and transactional)
- Geographical and environmental data (including national maps)
- Companies registry data
- Public transport information (inter-State and intra-State)
- Declaration of asset disclosure
- Political agendas.

## 10. Data collection

It should be noted here that, in many African countries, core data collection is conducted by the national office or bureau of statistics. To ensure, however, that the data collected will really result in increased transparency and drive innovation, African countries may need to ensure that all public agencies conduct data collection in relation to their functions. This may of course mean changes to internal processes and human resource considerations will need to be addressed. Data collection issues are further addressed in chapter IV below.

## 11. OGD pilot test

Once a government has addressed the issues surrounding its information infrastructure, collection and digitization of data as well as the constraints on the use and reuse of public service information, commenced the citizen awareness

campaign, and articulated the open government and OGD strategy, it should commence with a pilot of the OGD initiative.

Such a pilot would test the data portal as developed and assess the level of organizational and technical coordination in the system. The pilot should run for a few months to test the usability of the system, highlight bugs in the system and illustrate the extent to which the data are accessed and if possible, reused. The Open Data Handbook suggests that, when opening up data, countries should start small and only open up one data set or even a part of a larger data set, but then move as quickly as possible. It also suggests that governments should engage early and often with the users and the potential users of data, especially the civic hackers or so-called “infomediaries” who take open data and public service information and turn it into useful applications and services that can serve the general public.

On conclusion of the pilot, the system should be officially launched to the public. It should be noted that the improvement of the system is a continuous project and the launch of the data portal should not be seen as a final step in any respect but rather as the beginning of an ongoing process that requires progressively more effort and resources.

Opening data
Address legal and licensing issues
Address data collection issues
Ensure that data are legally and technically open
Choose data sets to be released
Conduct pilot test
Launch data portal

## B. Stakeholders

### 1. Public sector

The public sector is important in various capacities for both open government and OGD. Where the OGD approach forms the core of an open government process, the public sector will act variously as the drivers, the producers, the implementers, and users of OGD. There

are however, different agencies within the public sector that have crucial responsibilities in an open government and OGD project. The present section will identify the key public sector stakeholders for an open government project and provide clarity on their respective roles.

**Coordinating administrator or organization:** As discussed in chapter III, section A, coherence and coordination in open government and OGD will be achieved through a coordinating mechanism. This person or organization will be crucial to the success of the project. In addition, agencies such as ministries devoted to ICT and national planning will play a crucial role.

**Data collection agencies:** As the release of data is central to an OGD initiative, there must be buy-in by all public agencies, which must see data collection as central to their core function. While most agencies collect (or ought to collect) data that applies to their area of operations, there are certain centralized data collection agencies at the federal and state or regional levels, who collect high-value data sets, whose significance is crucial to the success of open government and OGD projects. This includes data of the following kinds: economic (macroeconomic, trade, budgetary, financial); socioeconomic (demographic, income, poverty, housing, education, health, household, transportation, consumption); geographical (geo-coding, environmental data and location information – micro and macro). These agencies must be at the forefront of any public sector commitment to open government and OGD so that they can provide the data collection and management support required for these projects.

- **Community organizations:** Public community-based organizations such as public libraries and community centres will gain prominence as a country moves towards open government and begins to open its public data. Public libraries will act as centres for both the dissemination of data (in both digital and print form) and in rural areas can serve as a point for the collection of community level data. Although Internet penetration in Africa is currently low, public libraries can provide Internet access to rural communities, where the last mile has not been linked.

- **Research organizations:** Public sector research organizations must be involved to ensure that they coordinate research efforts on the utility and impact of open government and OGD measures. There are several international studies on open government and OGD, but African governments should prioritize research on open government and OGD once the project is under way for impact assessment and to determine areas of underuse.
- **Legislature:** As demonstrated in chapter II, section A, a myriad of laws would be required for a combined open government and OGD project. It is thus essential that the legislature and any relevant legislative committees are engaged from the preliminary or preparatory stages to ensure the smooth passage of relevant legislation.
- **Mid-level bureaucracy:** according to the Open Data Study, the cooperation of the middle tier of civil servants, especially those with direct responsibility for implementation in public agencies, is crucial to the success of an OGD initiative.

Key public sector stakeholders
Coordinating agency
Data collection and statistical agencies
Public sector research organizations
Legislature and legislative committees
Mid-level public servants

**2. Private citizens and civil society**

Various studies on open government and OGD have reiterated the importance of citizen and civil society participation in open government and OGD initiatives. As discussed in chapter 4 of the present guidelines, the identification of stakeholders is one of the first tasks to be conducted by governments wishing to implement open government. These stakeholders will include individual citizens as well as those organized into specific interest groups (civil society). This section will examine the role and functions of

citizens and civil society in the implementation of open government and assess how they may be effectively engaged to ensure the success of the project.

● **Citizen participation**

To ensure the success of the open government and OGD project in Africa, governments should take a number of actions in relation to citizen participation. These include:

- Encouraging citizen buy-in through awareness campaigns
- Ensuring citizen input in the development of open government and OGD strategies
- Organizing a citizen vote in the initial or subsequent data sets
- Ensuring citizen involvement in the OGD pilot
- Institutionalizing a mechanism for continuous public feedback.

Citizen engagement mechanisms should be relevant and appropriate to the level of functional literacy of the majority of the population to prevent open government and OGD becoming an elitist space. In addition, arrangements should be made to ensure that marginalized, vulnerable and minority groups are included in citizen engagement mechanisms.

● **Role of civil society**

Civil society may be engaged in an open government and OGD initiatives in Africa through:

- Civil society engagement and adoption through awareness campaigns, which highlight the possibilities for greater reuse of OGD
- Civil society input in the development of open government and OGD strategies
- Facilitating an understanding of civil society's needs for information and release of government data to feed into choice of data sets
- Facilitating the improvement of technical skills and competence of groups that are crucial to the OGD system, such as journalists

- Encouraging engagement through open data and apps competitions
- Civil society involvement in the OGD pilot
- Encouraging monitoring by civil society of the information demand and supply of information required by all stakeholders.

#### Key roles of citizens and civil society

Awareness and buy-in

Involvement and engagement at all stages

Ensuring utility of released information

Reuse and repurposing of released information

Monitoring and feedback

### 3. Awareness and engagement

#### • Consultations

Governments must ensure that they solicit the opinions of citizens, civil society and the private sector on the thrust of open government and OGD policy, and that they create awareness and ensure the buy-in of these groups, as this is crucial to the success of the initiatives.

All the identified stakeholders must be consulted on the measures that the government is proposing and on the rationale for opening data and the move towards open government. Citizens must also be assured that an effective data protection framework is in place and any major concerns addressed. For public consultations, the government may only rely on public hearings and town hall meetings to a limited extent. These will be more valuable if they are broadcast live on national television, through webcasts and on the radio, in order to reach persons in both rural and urban areas.

There must be a set timetable for these consultations to achieve the widest form of participation.

#### • Traditional media

In Africa, governments would have to ensure that traditional media such as print, (terrestrial) television and radio form a major part of civic awareness and engagement campaigns in relation to open government and OGD. This is because

of the low level of Internet penetration on the continent. However, as discussed in chapter 3, the high level of mobile penetration means that the mobile platform must be harnessed in such campaigns. Thus, SMS campaigns (although these come with a cost) and the use of mobile apps and social media sites such as Twitter, YouTube, and Facebook must be included in awareness campaigns.

The bottom line is that several channels of engagement must be adopted in parallel and simultaneous campaigns during the period allocated to awareness and engagement. Governments should also use early adopter advocates or activists who can recruit their networks to support open government and OGD initiatives.

#### • New media

Given the immense growth of new technologies in the past decade, ICT has become a useful tool for creating awareness and it can provide an enabling environment for dialogue, advocacy and activism. Governments should rely on social media to help them communicate more with constituents and private sector stakeholders.

Webcasts should also be used by governments to organize live transmission of important government activities such as parliamentary sessions and court sittings. Webcasting enables the presence of an online audience during town hall meetings, parliamentary debates, press conferences and other government fora. They can also be used to disseminate information about events such as town hall meetings, public hearings and sensitization workshops or conferences on open government and OGD. They have a multiplier effect, with very little additional cost, and they enable sharing of videos with a vast number of people.

## IV. Conclusion

- **Sustaining the open government initiative**

To sustain an open government and OGD initiative, governments and all stakeholders must promote the opening of data, and the development of new applications. Awareness and engagement campaigns must be on-going and all stakeholders must collaborate on issues around open government. As is highlighted in the Report, a move towards open government may be

hampered by illiteracy and poor infrastructure, and African governments must take African realities into account in pursuing open government. Prior to the completion of an OGD project, African governments may wish to pursue other means of achieving open government such as by publishing and distributing information on budgeting, asset disclosures, procurement information and disseminating same as widely as possible.

A government can adopt the eight steps towards the evolution of a perfect ICT-centred Open Government.

**Table 1: Steps towards the evolution of a perfect ICT – centred Open Government.**

Stage	Action	How it Works
1.	Launch an open government and OGD policy initiative or 'directive'.	A cue can be taken from President Barack Obama's ratification of the 'Memorandum on Transparency and Open Government' on his very first day in office as President of the United States.
2.	Hire programmers, apps developers and ICT officers into government.	Governments' apps developers and ICT officers would constitute an in-house Government 2.0 department that would handle the creation, maintenance and continual management of all ICT needs and innovations for better government service to the people.
3.	Build and launch an official government data portal.	This is an online platform on which data from all departments, agencies, ministries and arms of government is published. This would be an open databank for regularly uploaded all public service information.
4.	Publish OGD on cloud computing platforms	This involves the use of open source applications and ICT tools, which allow data to be accessible for use and reuse from all kinds of devices and multiple electronic formats. Nothing should be created in proprietary formats.
5.	Create and/or use social networks/ media to allow information and ideas flow between government and the people.	Public-private participation (PPP) is the bedrock of a more informed and responsive public sector in its policy-making and service delivery to the people. Government would have to use media like Facebook, Twitter etc. Government must also allow search, response, chat, blogs and other interactive tools built into official open data websites. With this, people can search information easily, ask questions on policies, make suggestions to leaders directly with direct access (i.e. no bureaucracy) and feedback.
6.	Use only good and worthy tools that would add value to the people.	Government should allow independent developers to contribute to ICT innovations for open government by buying and using new applications whether created by in-house team or outsiders. Let government with its in- house ICT experts continually advance in technological innovation and use at the same pace as the private outside-world to continually add value to its service delivery and open agenda to the people.
7.	Continually upload public service information on the open data platform.	There should be a difference between the working of the freedom of information mechanism and open government. Government should voluntarily publish public service information without the citizen first requesting what ought to be made public.
8.	Let the implementation of an open government agenda be sustainable beyond an incumbent government.	Policy inconsistency kills great ideas that ought to protect the people from difficulties. open government and OGD initiatives must be institutionalized as part of the perpetual government machinery

*Source: created by Author.*

In conclusion, no matter how simple or complex an OGD implementation action would be, “democratizing data reduces cost and eliminates waste, fraud, and abuse; creates new jobs and businesses; and improves people’s daily lives.” (Office of the President of the United States, Open Government: A Progress Report to the American People, 2009) Indeed, Tony Blair once noted that, for public services, the real opportunity is to use information technology to help create fundamental improvements in the efficiency, convenience and quality of our service (for) our task is to shape public services that meet modern expectations.

By implementing open government through OGD, governments can harness technology for different purposes that would enhance better service delivery, transparency, accountability, participation etc.

In summary, the advantages of an open government agenda implemented through the use of ICT tools are enormous and transformational. It brings about ease, speed and effective service delivery when people can simply get online and access the government data that they need without going through the bureaucratic process of requesting and waiting for a response to a freedom of information request. Furthermore, crowdsourcing through social media, online conferencing of parliamentary sessions and other open source tools enables governments to be more informed and effective and allows them to access expert knowledge from the private sector and from informed citizens.



# PART TWO:

## Report on policy, legal and technical requirements for open government implementation in Africa

### Section 1

#### 1.1 Introduction to open government and open government data

Open government is a term that was introduced in governance more than half a century ago, but which has been defined more technically during the past decade (Davidson and Yu, 184). Perhaps the most recent attempt at defining the term can be seen in the alliance of governments to form the Open Government Partnership (OGP), which aims to define and assess how States provide certain political public goods to their citizens. The Partnership was established in 2011 by a group of eight countries to foster openness in government and agree upon uniform standards and indicators for assessing the success or failure of member States in meeting the set standards. The key indicators of open government identified by the Partnership are: citizen engagement; fiscal transparency; declaration of assets by public officials; and access to information. These four pillars determine the eligibility of States to join the Partnership and form the basis for States to build on identified governance objectives.

Since its establishment, the Partnership has since grown to 75 participating States, including Burkina Faso, Cape Verde, Cote D'Ivoire, Ghana, Kenya, Liberia, Malawi, Nigeria, Sierra Leone, South Africa, Tunisia, and the United Republic of Tanzania. These States, in addition to meeting the preliminary requirements set by the Partnership, are expected to prepare and implement open government action plans to document their

progress in enhancing openness and to help guide their open government aspirations. Below, we will discuss the progress made by some of them in this regard. However, it is important to understand how open government can best be conceived in Africa within the context of regional political and economic realities. In order to do this, those involved in introducing and implementing the relevant principles and initiatives must provide a comprehensive definition of open government and related terms.

#### 1.2 Defining open government

The present report seeks to provide a definition of open government that is descriptive of how open governments can be identified and to further propose how governments, African governments in particular, can best adopt certain prescribed standards of openness in order to achieve significant economic and political gains.

Open government has been defined by OECD (which refers to open *and responsive* government) as “the transparency of government actions, the accessibility of government services and information and the responsiveness of government to new ideas, demands and needs” (OECD, 2009, p. 113). This definition covers the nature of government actions, the availability of government-held information, and the receptiveness of governments to collaboration with, and the contributions of, stakeholders. Accordingly, open government invariably depicts, among other things, the level of accessibility of a government to its citizens who can, as a consequence, participate in governance. This is why the main aims of open government are to increase transparency, accountability and participation. The transparency, accountability and participation objectives of open government touch on key governance actions that determine the indicators that help to assess the openness of governments across the world. These are not exclusive or exhaustive objectives of an effective open government programme, and they are interconnected in such a way that one objective would ensure the attainment of another; for instance, the United States Agency for International Development (USAID) identifies the key principles of open government

as transparency, participation and collaboration, noting that transparency promotes accountability (USAID, 2010, pp. 2, 4). As noted earlier, these principles relate to important perceptions of what governments do, how they do it, and with whom.

Consequently, we can say that open government focuses on several areas of governance, among which are the availability of information produced and stored by governments, which improves accessibility and engagement between governments and their citizens, hence providing the opportunity to interact meaningfully and productively with a government in order to impact governance processes. While, technically, open government does not focus very much on how information is made available, its main premise is that information, particularly government-produced and government-held information, should be made available to citizens, whether or not they demand it. In this light, the Open Government Declaration of the OGP declares the commitment of participating governments to “Increase the availability of information about governmental activities” (OGP 2011).

Owing to the growth in information and communications technology (ICT), the focus on how governments provide data and information has become tied to descriptions of what constitutes an open government. For example, one of the objectives of the Open Government Declaration of OGP is to “increase access to new technologies for openness and accountability”; in addition, the United States Government notes that, as part of its effort to increase accountability, public government information must be made available online in open format. These are just a few examples of how the method of providing government information has been made a core part of open government policy.

Accordingly, how governments treat information about their activities determines, to a large extent, how open they are, which is why many of the open government indicators developed by experts and relevant institutions usually include the need for governments to provide access to information to citizens. This is clear from the above-mentioned OGP indicators. In addition to the indicators identified by the Partnership, OECD, which has

contributed significantly to the development of the discourse on open government and related issues, provides a broader, more comprehensive set of objectives for the determination of openness. OECD indicators address government practice, policies, and institutions targeted at enhancing the transparency, accountability and participation objectives. Broadly, the identified core indicators are: access to information; ombudsman institutions; audit institutions; and consultation policies (Involve, 2009). Each of these indicators has sub-indicators that break down different questions targeted at ensuring tangible pursuit of the indicators (Involve, 2009, p. 2). The focus on defining tangible indicators shows a commitment to providing detailed, practical, measurable outputs that are geared towards fulfilling the transparency, accountability and participation objectives.

The purpose of open government is to enhance the performance or effectiveness of governments in order to ensure and improve the fulfilment of the transparency, accountability and participation objectives. Accordingly, open government encompasses the efforts of governments to be more accessible to citizens, through various activities that ensure access to information, available knowledge about government activities, and participation in governance.

The Open Government Declaration of OGP is a statement of commitment made by member States, outlining the principles that drive the Partnership and which the member governments commit to govern by. It sets the objectives that should be achieved in meeting the goals of the community. The Declaration:

- Acknowledges the increasing global demand for transparent, accountable, and effective governments
- Recognizes the right of OGP member States to pursue and promote transparency according to differing national priorities and circumstances
- Emphasizes the commitments of member States to promote transparent governance, tackle corruption, empower citizens, and advance effective governance by exploiting advances in technology

- Commits members specifically to undertake, among other tasks, to “provide high-value information, including raw data, in a timely manner, in formats that the public can easily locate, understand and use, and in formats that facilitate reuse”
- Commits members to undertake to guarantee effective remedies in cases where information is wrongly withheld
- Commits members to enhance capacity and access to new technologies
- Undertakes to promote transparency in policy-formulation and decision-making, as well as to foster citizen engagement.

Terms such as “democracy” and “good governance” defined the standards of effectiveness set for governments in the past. The current focus on open government is part of a renewed interest by various stakeholders, in and outside government, to define practical and measurable ways to hold governments accountable and to ensure their effectiveness in delivering good governance. While the objectives and the indicators have been identified, it is left to governments to determine the methods through which they would meet the set expectations. Consequently, there is an effort to prescribe methods that will drive the achievement of the set objectives, such as the provision of data by member States in specific legal and technical formats, which is indicated in the Open Government Declaration. This report focuses on the expansive provision of government data, which includes information produced and held by government and information about government activities, as one of the most effective means of implementing open government.

### **1.3 Open government through open government data**

Transparency, accountability, and participation are essentially linked to communication (providing information that is accurate, timely and useful to the public), and as such open government has been described as “an all-embracing label for a more accessible, transparent and responsive governance system, where information moves to

and from the government, through a multitude of channels” (Involve, 2009). Accordingly, open government can be understood within the context of a somewhat narrower ‘information-centred’ discourse known as the provision of Open Government Data (OGD). This would require that attainment of the transparency, accountability and participation objectives must be understood within the context of enhancing the provision and sharing of information produced, commissioned, and held by government. By thus adjusting the scope of the discussion on open government, it becomes easier to focus on achieving more concrete objectives and setting more specific benchmarks and indicators that are still targeted at achieving the transparency, accountability and participation objectives. In order to understand this better, it is important to discuss the different ways through which the transparency, accountability and participation objectives can be achieved by opening up government data.

#### **1.3.1 Linking open government with open government data**

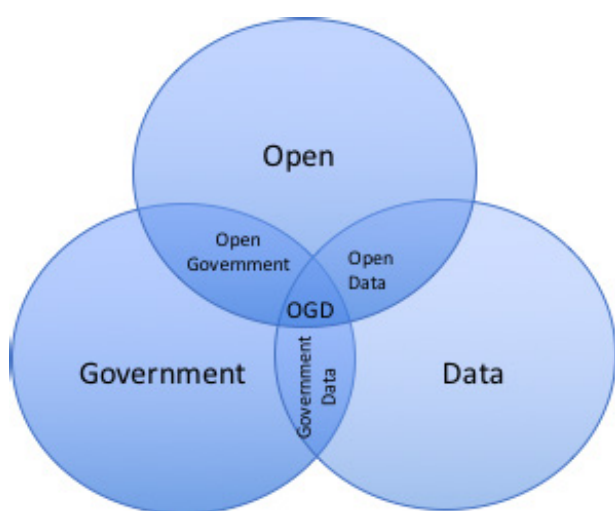
It is important to understand the context within which “openness” is understood by open government and OGD experts. Usually, when speaking of open government, “open” will mean transparent, accountable, participatory, collaborative and accessible, and would refer to the ability of governments to conduct their affairs in a way that would allow the public have access to data on the activities of governments. So, when we think of a government that is open, we would normally think of a government that allows citizens to have easy access to information produced or stored by it, a government whose activities are publicly displayed so that citizens are able to scrutinize and comment, and a government that engages meaningfully with its citizens. Accordingly, “open” in relation to “government” is basically about the achievement of the transparency, accountability and participation objectives.

OGD, on the other hand, is a variant of a broader (and at the same time narrower) scope of “openness” in relation to data. The open data movement has become a significant part of the current information and communications technology (ICT) culture in which the Internet

and relevant applications and devices that make the circulation of information easier are being used to spread information faster and wider.

The notion “open data” covers a range of areas such as education, computing, research and scholarship, and government. It ensures that data relating to any of these areas is made easily available to the public, usually for free and under licenses that are less restrictive than conventional intellectual property default licenses. Accordingly, open data allows people have access to data and, in most cases, to use and reuse such data for their own purposes, thus enhancing innovation and creativity in a variety of fields. As noted above, OGD falls within this general idea of making data openly available. Accordingly, OGD relates to government data that is made openly available under terms that are liberal and allow users to do a number of acts in relation to the data provided. The diagram below provides a description of the relationship between open government, open data, government data and OGD.

**Figure 2: OGD Venn diagram**



Source: [www.flickr.com/photos/notbrucelee/5512318395/](http://www.flickr.com/photos/notbrucelee/5512318395/).

The above diagram shows that the notions of “openness”, “government” and “data” exist in separate spheres and as separate concepts that may be defined in a variety of ways by observers. There are points where two of any of these concepts intercept to modify the basic sphere within which each one operates exclusively. For instance, data exist in a number of formats and

are made available in a number of ways, but open data have certain characteristics that have been defined by indicators set out by experts who have helped to develop this field. The term “data” refers to raw, unprocessed information that could cover a wide range of issues from music to film to arts to government and so on. Data could further be classified in relation to how it is made available or to the provider or holder of such information, hence we can have private data, closed data, confidential data, or open data. On the other hand, data provided or held by governments are referred to as “government data”. Similarly, governments exist in a sphere that refers broadly to public authority, but this can be modified by intercepting it with the open sphere, in which case, it would become necessary to define what open means in relation to public authority. Consequently, each interception produces a new set of relationships, which we will describe briefly below.

### 1.3.2 Open data

The term “open data” refers to data that are accessible, machine-readable, available for free, and licensed openly to confer limited or unlimited rights on the user of such data (See MacKenzie Global Institute, 2013, 3). Accordingly, “open” in relation to data is defined based on the form in which the data are provided and the terms under which they are provided. This would cover both technical and legal aspects of data accessibility. For data to be open, they must be provided under terms that make them accessible to all people, that is, without restriction to certain groups; they must appear in a format that is also accessible and easy to retrieve; and they must provide authorizations that permit the use, reuse and adaptation of such data.

The open data approach is a product of current developments in ICT, and as such it requires the use of new technologies, which allow widespread dissemination of information and different means for use, reuse and adaptation of data. Accordingly, a core element of the open data movement is its reliance on technology (mobile devices, computers, the Internet) for its feasibility and implementation.

Since not all data can be open, there are privacy laws and data protection laws that protect certain classes of data, and there are laws relating to national security, public order, public health and other concerns of state that make certain classes of data inaccessible to the general public (see OECD 2008, p. 5). Such data, since they are not accessible in the sense that is required for open data, are not open data. They may be classified as private data or confidential data. Somewhere in the middle of the spectrum between open data on the one hand and confidential or private data on the other, are closed data. Data of this type may not be private or confidential but, for whatever reason, they are not provided under the terms that open data are provided: for example, closed data may be protected by copyright laws that do not allow the user to exercise certain rights in relation to the data concerned. Closed data may be accessible by the public and openly licensed, but they may not be provided in machine-readable format. Accordingly, the technical and legal requirements for the existence of open data are core elements of the phenomenon that exist to ensure that data are provided in a format that is widely accessible, particularly through the use of technology, and that it is openly licensed.

The relationships between different classes of data can change based on social, political or economic developments and, as such, the relationship between data and openness is not static. Closed data can be made open, which places them significantly outside the realm of information that cannot be accessed by the public based on their classification as available only to certain groups and people, usually owing to the nature of such information (confidential and private data). In the same vein, private

data can be made open or closed where there are legal procedures for making certain data or information available to wider groups of people. For example, where the owner of private data gives authorization to third parties to use the data in a manner that divests such data of their confidentiality, then they may become closed or open. Laws may also be introduced to make formerly confidential data closed or open. In England, a Health and Social Care Act compelled general practitioners to upload confidential patient information to a database that would make the data available for sale. However, the United Kingdom Data Protection Act places a legal obligation on general practitioners to protect the confidentiality of such data, which cannot be shared without the authorization of patients (Commons Select Committee, 2014).

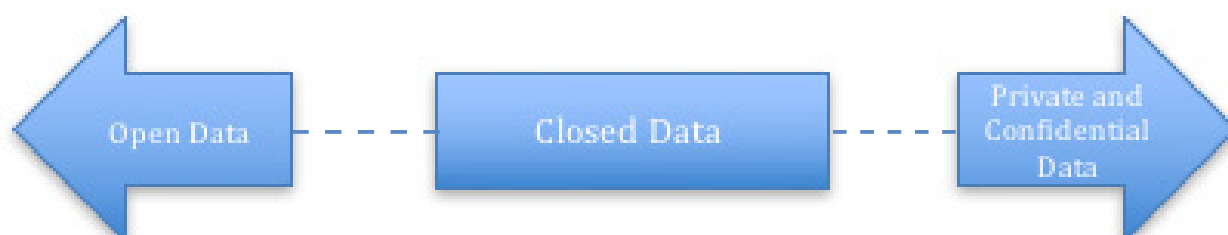
It is important to note that a legal or other official mandate is very important in the determination of what constitutes confidential data and in converting the classification of such data to a more accessible classification.

Generally, the goal of the open data movement is not necessarily to open private or confidential data, but to open closed data for the benefit of data users in the relevant spheres where such data are held or produced.

### 1.3.3 Government data

The term “government data” refers generally to data that are held, controlled, or provided by governments. Governments here refer not only to those institutions that are responsible for political and economic decision-making, but to all aspects of public organization that would fall under an all-encompassing connotation of the term “government”. Accordingly, the institutions

**Figure 3: Classification of data in an openness spectrum**



responsible for the provision of public goods, otherwise known as the public sector, constitute what is here referred to as government, in other words, public authority.

The category of government data is sometimes referred to as public sector information. OECD defines public service information as “any kind of information that is produced and/or collected by a public body and is part of the institution’s mandated role” (OECD, 2006, p. 7). While the term government data refers mostly to raw, unprocessed data, public service information includes processed information and government analyses, among others. All government data are public service information but not all public service information is government data. However, some may use the terms interchangeably, and the distinction has never really been pursued (European Commission, 2014).

Thus, government data or public service information refer to information produced, commissioned, or held by the public sector in a country. They could be educational, cultural, economic, political, geographical, technological, or administrative. This kind of information produced by the public sector includes data that cover government activities and non-government activities, such as cultural events and artefacts, weather-related information, data on health and sanitation, demographics, and so on.

The notion of government data, therefore, goes beyond the scope of open government. While the former focuses on providing access to governance-related information, such as information about how the government is run, the latter covers all kinds of information held by the government, including governance-related and non-governance-related information. This has led to the identification of open government as being somewhat political and government data as combining both political and non-political aspects of government-held information. This distinction will not be pursued critically here but will be referred to in determining how African governments can seek effective implementation of their open government initiatives.

### 1.3.4 Open government data as a melting-pot

OGD is any government-produced, -commissioned, or -held data that is freely available and publicly accessible. Accordingly, OGD is government data that falls within the ambit of open data and **may** promote open government. Based on Figure 1 above, open government data constitute the space where open government, open data and government data intersect and converge. Since the open data approach is about using new technologies to make data more accessible and more widely disseminated and open government is about improving the transparency, accountability and collaboration of governments, mostly by making available information about government activities and providing platforms for participation in government, OGD is presented here as an effective means for the promotion of open government through the use of technology; although, OGD, as we will see below, involves more than achieving the open government objectives.

With regard to the indicators for providing and evaluating OGD, experts have agreed that OGD must be:

- Complete
- Primary
- Timely
- Accessible
- Machine-readable
- Non-discriminatory
- Non-proprietary
- License free.

([www.opengovdata.org](http://www.opengovdata.org)).

As will be shown below, one of the fastest ways to ensure that governments and citizens become fully committed to achieving the objectives of open government in Africa is by ensuring that there are proper incentives and that the correct enabling environment for engagement with government and participation in governance is put in place. By making government data openly available, governments ensure that citizens have easy access to government-produced (including

governance-related) data and provide platforms for them to use such data in a number of ways that would enhance their engagement with government institutions, among other things. This would promote transparency in government and enhance accountability in government activities, which will be open to comments and suggestions from citizens who have a platform from which to participate in governance.

A key concern about making government data or public service information freely available, where it is not confidential information, is the expense of producing or commissioning such data. Since open data are usually cost-free, there are concerns that governments, having incurred costs in producing, reproducing, or commissioning such data, should be entitled to recoup such costs through paid access to the information. This is particularly so when the users, who have access to information for free, make commercial use of the information. A counter-argument is that government costs are borne from public funds, including citizens' taxes, among others, and as such, citizens are entitled to access information produced or commissioned with public funds at no additional cost to themselves.

While the qualification of government and data as open government or open data has somewhat different connotations, the qualification of government data as OGD combines a mix of the

openness of government and the openness of data, even if the notion of "government" in OGD is a qualification of the type of data, just like "open".

In simple terms, "openness" with regard to governments relates to how the government in question conducts its affairs and its relationship with citizens. We say that a government is open if its activities are accessible to the public, who can provide feedback and constructive criticism in relation to information obtained from and about government activities. "Openness" in relation to data refers to the manner in which the data are provided as well as the terms under which it is provided. Data are open when they are provided in formats and spaces that can be accessed by all and under terms that allow users to exercise certain proprietary rights in relation to such data. This will also apply to the openness of OGD, but so will the openness of governments since OGD is expected, among other things, to promote the objectives of open government.

The table 2 below provides a breakdown of this.

The focus of open government is mainly governance, whereas in data-related conceptions of openness, the focus is information-accessibility for governance and other purposes such as innovation in business, culture, education, research, social services, and so on. The effect of this is not

**Table 2: Breakdown of the components of OGD**

	Open government	Government data	Open data	Open government data
Open	Transparent, accountable, collaborative, responsive, participatory (accessible, machine-readable, openly licensed data)		Accessible, machine-readable, cost-free, non-proprietary, licence-free, primary, non-discriminatory	Accessible, machine-readable, cost-free, non-proprietary, licence-free, primary, non-discriminatory (transparent, accountable, collaborative, responsive, participatory)
Government	Public sector institutions/ public decision-makers/ political authority	Public sector/ authority		Public sector/ authority
Data		Raw unprocessed information  (public service information/processed information)	Raw unprocessed information	Raw unprocessed information

Source: created by Author.

to limit the reach of open government to strictly political objectives, as some would suggest (see Davidson and Yu, 2012), but rather to show that a focus on OGD could promote the transparency, accountability and participation objectives of open government as well as other objectives, particularly those relating to innovation and direct, measurable socio-economic and cultural development. Hence, an effective way to ensure that governments and citizens of African States develop significant interest in open government implementation is by situating the discourse and practice of open government within a system of somewhat broader objectives that create additional incentives for stakeholders; in other words, implement open government within the framework of OGD.

Global concerns about open government have risen over the past few decades, and with the establishment of a global multilateral initiative such as OGP, it is important to begin a contextual discussion about how open government initiatives can be developed and made more effective in Africa. Both within and outside the Partnership, several African countries have begun to build implementation frameworks for initiatives that address transparency, accountability and participation objectives, particularly in the area of making information produced by government available to the public. Many of these initiatives have been introduced within the context of promoting good governance (a 1990s catch phrase for political effectiveness) and some within the context of using ICT for governance and development.

In the past two decades, the growth of information and communications technology (ICT) has made the use of technology an important tool for the facilitation of open government, especially as it relates to the storage and retrieval of government information (increased transparency and accountability) and the opportunity to engage with governments through digital platforms (enhanced citizen participation). Accordingly, in order to ensure that the transparency, accountability and participation objectives of open government are attained, it is important for governments to make public service information openly available to the public for use and reuse, in order to find new and innovative ways to encourage citizen participation in governance as well as facilitating broader development goals.

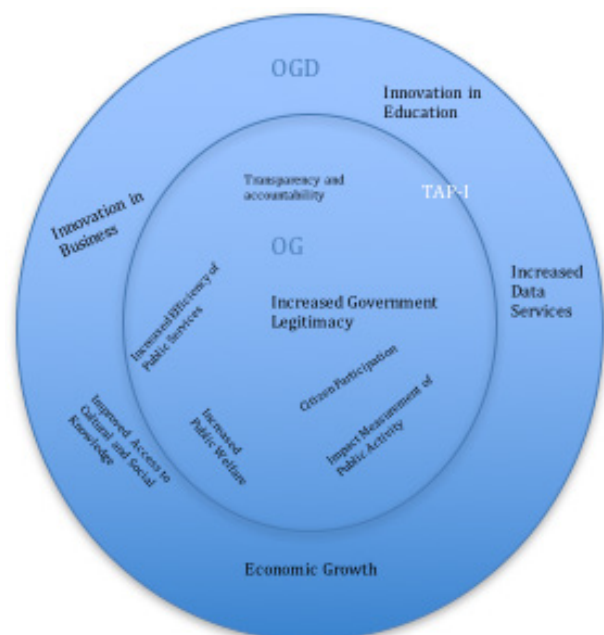
There are several reasons why governments should be thinking more about introducing OGD into their open government implementation plans. Some of the objectives and benefits of OGD include:

- Increased legitimacy of government
- Increased citizen participation, inclusive decision making
- Increased efficiency of public services
- Innovation in business, education
- Increased responsiveness
- Knowledge
- Impact measurement of public activity
- Increased public welfare
- Transparency and accountability.

(Open Data Handbook).

The transparency, accountability and participation objectives of open government are present within the objectives of OGD, which provide even more incentives for both governments and their citizens to provide and use OGD. Accordingly, open government implementation can be achieved by providing OGD, which would then help in achieving the transparency, accountability and participation objectives and the additional objective of innovation in business, education, research, service delivery, and so on.

**Figure 4: Shared objectives of open government and OGD**



Source: created by Author.



Figure 4 shows how the objectives of open government and OGD are significantly interlinked. Although OGD does not necessarily proceed from clearly defined objectives, but rather clearly defined qualities and processes, its objectives flow from the results of those processes and qualities. Open government, on the other hand, is about achieving set objectives, while the processes are defined by strategies created to meet those objectives. Accordingly, a combined reading of figure 1, table 1 and figure 3 will show that open government objectives can be achieved by the pursuit of OGD, which processes result in the attainment of open government objectives, among other things. On the other hand, OGD processes can be used to promote open government objectives, but may not always be used in the achievement of those objectives. So, while one phenomenon focuses on how governments govern, the other focuses on how governments share information. In essence, both operate within the same sphere and have similar, sometimes identical, objectives, as shown above. Accordingly, OGD provides a process-driven approach to implementing open government, an objective-driven phenomenon.

Shifting the focus from changing how governments govern (open government) to changing how governments share information (open government data) will provide less controversial alternatives to improving governance while also making advancements in other areas of development. In this light, a significant part of the following conversation will focus on how technology and innovation, through OGD, can be used to implement open government, while also touching on non-OGD processes that can be used to enhance open government, particularly within the African context.

## Section 2

### 2.1 Legal and policy framework for open government implementation

Open government involves efforts that are aimed at making governments more transparent and accountable to the people they serve. Accordingly, it focuses on creating an environment that fosters the objectives set by governments in this regard. In order to do this, governments must provide clear legal and policy frameworks aimed at achieving those objectives.

The legal framework consists of a set of laws enacted to establish institutions and create obligations that are judicially recognized and enforceable, while the policy framework is a much broader set of goals and intents which identify specific activities that the government is expected to undertake in order to achieve clear and practical outcomes. Law and policy complement each other in that while the latter provides general guidelines for action in a particular area, the former provides the rules that will govern those actions. As such, there are certain actions that are necessary for the implementation of open government and certain rules that must be introduced to govern those actions.

Different observers may come up with different sets of rules to identify open government indicators, and this would usually be based on perceptions of core areas of intervention that would make government more open, that is: more transparent; accountable; participatory; collaborative; and responsive. For OGP, the focus, as noted above, is access to information; declaration or disclosure of assets by political leaders; budgetary and fiscal transparency; and citizen engagement ([www.opengovpartnership.org](http://www.opengovpartnership.org)). For OECD, the focus is on access to information, data protection, administrative procedures, the Ombudsman, and the supreme audit institution (OECD, 2009, p. 114).

This means that governments interested in fostering open government must introduce laws and policies to promote these indicators.

In addition to the objectives set by and for its members, OGP also realizes that there must be processes to back the commitment of governments to foster these objectives. Hence, new technologies are regarded as important for facilitating the method of fostering open government. The actual open government principles and indicators are about governance processes, but these can be influenced or enhanced by identified (open data) processes.

While there are overlapping indicators, each observer focuses on what they think are the key areas that would promote achievement of the transparency, accountability and participation objectives, and usually the government is expected to show its commitment to implementing open government by introducing laws and policies in those areas. The laws introduced by governments may directly address an indicator, such as the enactment of Freedom of Information Laws; contribute to the fulfilment of an indicator, such as anti-corruption laws; help facilitate administrative procedures, such as the establishment of institutions; or define the processes through which the objectives can be achieved, such as open data laws. Accordingly, the legal and policy framework for the implementation of open government can relate to laws and policies that facilitate the achievement of transparency, accountability and participation objectives generally as well as those that relate to the method through which transparency, accountability and participation objectives are achieved.

## 2.2 Policy framework for open government implementation

As noted above, the policy framework consists of soft rules that pave the way for hard rules. Accordingly, in order for a government to introduce new rules, principles, standards, and so on, it is usually practical to situate them within a broad framework that describes objectives, roles, expectations, outcomes, and players. The policy framework provides for direct government (and non-government) intervention in an area and unforced participation by different stakeholders. Usually, policy is introduced to foster culture and community in a particular area. Accordingly, the

policy framework for open government would usually consist of rules introduced within and outside government institutions to guide actors in achieving the transparency, accountability and participation objectives. The objectives are clearly stated, activities are defined, goals are set, and outcomes are stipulated.

A good example of open government policy would be President Obama's Open Government Directive, introduced in 2009 to promote similar objectives to the transparency, accountability and participation objectives. The Administration issued this directive to public sector institutions (executive departments and agencies) in order to take certain steps towards the attainment of the open government objectives of transparency, participation and collaboration. The steps outlined by the Government included: placing public government information online; improving the quality of government information; creating and institutionalizing a culture of open government; and creating an enabling policy framework for open government. The Directive set time-lines for government agencies and departments to comply with the instructions it gave, and it also directed them to create comprehensive open government plans that would communicate their intent and efforts towards the achievement of the set objectives (Orszag, 2009, p. 3).

If open government is regarded as a "culture", the value system would be based on promoting the set objectives. Effective policy frameworks would consist of broad statements of purpose or intent that identify specific activities aimed at achieving definite outcomes. This is why OGP requires member countries to come up with an action plan when they are registered as participants of the Partnership. The plan provides the basis for the policy framework within which countries implement open government, as it identifies the principles and objectives of the government's open government strategy. It is usually broad enough to cover the different areas of intervention, which are defined by the indicators identified by the Partnership. Member countries provide detailed information about actors, initiatives, and activities that have been introduced or that are being planned by their governments in furtherance of the objectives. The Government of Liberia, for example, has

built its open government implementation strategy around transparency (including access to information); citizen participation and dialogue; accountability and integrity; and technology and innovation. The action plan notes past, ongoing, and future efforts by the Government of Liberia to enact relevant laws, establish institutions, organize activities, and provide infrastructure that would promote the achievement of the objectives identified under the indicators (Liberia, 2013).

The Government of Kenya focuses on: improvement of public services; improvement of public integrity; effective management of public resources; and corporate accountability. In these areas, the Government identifies initiatives such as the enactment of relevant laws; improvement of infrastructure, particularly with regard to ICT; organizing activities to promote engagement and participation of citizens in government; establishing relevant offices and institutions and hiring competent officials; and using technology in governance (Kenya, 2012).

The policy framework thus provides the basis for embarking on open government implementation, and outlines the activities that would build all the other frameworks, such as relevant laws, infrastructure, institutions, partnerships, and so on. Every country is expected to develop its policy framework based on its priorities, its open government objectives, its available infrastructure, and its contextual realities. The National Action Plan of the Government of Kenya, for instance, identifies town hall meetings as a viable activity for enhancing accountability and participation. In Nigeria, radio shows such as the popular “Brekete Show”, which gives citizens an opportunity to confront public officials who have abused their office, have gained increasing popularity.

Generally, a policy framework for open government implementation will contain some of the following:

- Objectives of open government that underlie the policy
- Principles that the government regards as fundamental to open government and definition of key terms as they relate

to the government’s open government strategy

- Commitment to enact laws that promote those objectives set by the government; these would include Freedom of Information laws; anti-corruption laws; public procurement laws; code of conduct laws for public servants; extractive industries transparency laws; financial governance and management laws, etc.
- Commitment to introduce policies in relevant areas. This would include open data policies; policies on the use of technology and infrastructure in the public sector
- Need for the establishment of institutions to handle particular open government initiatives or address particular open government objectives, including a public complaints commission; a public service commission; an Ombudsman commission; a financial audit and transparency commission; an anti-corruption commission; public officers’ code of conduct commission or disciplinary board, etc.
- Activities aimed at achieving the set objectives. These could include town hall meetings; regular media chats with government officials; online forums; collaborative working groups; television and radio shows
- Important actors or stakeholders and a definition of their role in the Implementation of policy frameworks
- Timelines within which fundamental components of the policy should be implemented.

Once the policy framework for the implementation of open government is set, it provides the basis for all other frameworks that must be put in place. It is basically a clarification of the principles and the objectives of open government and the manner in which these are to be achieved by the government in question. After the policy framework is put in place, proper implementation of open government can begin.

## 2.3 Legal framework

The legal framework for open government implementation consists of a set of laws (the “hard” rules) necessary to create the enabling environment for open government in a country. Just like the policy framework, the legal framework will depend to a large extent on the objectives identified by that government as well as the methods identified for achieving those objectives. Governments, in addressing the specific indicators that are outlined in their policy framework, would determine what kinds of laws would facilitate the achievement of those indicators. Sometimes, there is a need to enact a law that directly addresses a specific indicator, while at other times, laws may be tools to facilitate a broader objective, such as improving public integrity. Based on the practices of its member States, OECD notes that the following legal frameworks are necessary for promoting an open and responsive government: laws on access to information; laws on privacy and data protection; laws on administrative procedures; laws on ombudsman institutions; laws on supreme audit institutions (OECD, 2009, p. 114).

The above table shows how the legal framework for open government implementation is tied to the attainment of set objectives and indicators. Usually, the policy framework will contain a comprehensive communication of these relationships. Some laws and indicators serve more than one of the objectives, so that when the right legal framework is put in place, proper enforcement will ensure an extensive

implementation of the open government strategy.

Legal frameworks are necessary to create obligations on governments and other relevant actors to act in a certain way. Hence, indicators of open government might require direct legal enforcement, such as the protection of the right to freedom of information, the duty to disclose private assets, and the duty to disclose government expenditure. In addition, indicators and objectives may provide broad components that require different kinds of interventions, including legislative intervention. Examples include accountability, transparency, citizen engagement, and integrity. There are several different ways in which these components of open government can be implemented, legislative intervention in different areas and sectors being one of them. Accordingly, laws such as anti-corruption laws, public procurement laws, public service codes of conduct, and so on, would be necessary to facilitate implementation of open government.

Government activities can also be introduced in the policy and legal framework for implementation of open government, as is the case with the OGP National Action Plan of the Government of Kenya. The Plan promotes the use of media and new technologies for promoting integrity and accountability in government. Activities such as online forums can be used to engage citizens and encourage their participation in government, while mobile technology can be used to share information.

**Table 3: Legal and policy framework implementation**

Objectives	Indicators	Laws
Transparency	Budget transparency; access to information; disclosure of assets by public officials; audit institutions	Access to information laws; open data laws; data privacy and protection laws; laws on supreme audit institutions; procurement laws
Accountability	Disclosure of assets by public officials; audit institutions	Access to information laws; anti-corruption laws; laws on supreme audit institutions; public service code of conduct
Participation and collaboration	Access to information; citizen engagement; consultation policies	Access to information laws; open data laws; copyright laws; public administration laws; laws on ombudsman institutions

Source: [www.opengovpartnership.org](http://www.opengovpartnership.org); OECD 2009.

In summary, the legal framework for the implementation of open government comprises laws that create obligations and standards for the achievement of open government objectives.

As noted above, the objectives of open government may contain direct references to areas that must be addressed by legal intervention, the most obvious of these being freedom of information or access to information. Most of the indicators of open government usually contain this component because it is regarded as being at the core of a government's responsibility to its citizens. Public service information is produced by governments for different reasons and must be made available to citizens to whom governments must be accountable regarding how they run the government machinery. As such, access to information by citizens is not a privilege but a right that is at the core of open government.

### 2.3.1 Freedom of information

The right to freedom of information is provided for in Article 19 of the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights. The right is also recognized under article 9 of the African Charter on Human and Peoples' Rights. Accordingly, States and International bodies have recognized the right to freedom of information as a basic right that must be guaranteed to citizens for their existence in a democratic polity. In order to ensure that this right is properly guaranteed and protected, it is necessary that effective laws are introduced and enforced to that effect. In addition to the international recognition of the right, many countries have a general statement of the protection of this right in their constitutions; simultaneously, more comprehensive legislation is required to provide details of how the right can be protected by governments and properly exercised by citizens. These are called freedom of information or access to information laws.

Freedom of information laws lay down rules for government institutions to store information and make it available to citizens upon request by the latter. They also lay down the procedure for making such requests and for the response by the relevant government agency. While the constitutional provision on freedom of

information makes this important aspect of open government a constitutional obligation of the government, a clear legal framework provides the enabling environment for the exercise of that right.

Access to information is important for the promotion of transparency, accountability and participation objectives, and it is tied to other indicators such as citizen engagement, budget transparency, disclosure of assets, and audit and ombudsman institutions. Accordingly, this aspect of open government implementation is central to the effective implementation of open government strategies in any country, and the manner in which the government keeps citizens informed of governance matters, while providing the space for feedback and participation, will determine how open the government is.

Freedom of information laws serve as a guide for citizens and public officials, providing the rules governing information storage and provision. They tell citizens how they can access public information and tell public officials what to do to provide such information to citizens who request it. One of the limitations of freedom of information laws relates to the administrative processes required for the enforcement of such laws. Furthermore, information officers, under freedom of information laws, usually have the discretion to determine whether a particular request falls under the legally recognized exemptions, and this may be relied upon as a justification for withholding the information requested. This could lead to abuse of discretion and needless bureaucracy that could be time wasting and defeat the purpose of freedom of information.

In 2014, fewer than 15 African countries had freedom of information laws in place, while some still had freedom of information bills before their parliaments. The African Commission on Human and Peoples' Rights has produced a model law on access to information to serve as a guide for African countries interested in introducing freedom of information laws. The model law provides a minimum standard for governments to ensure that they do not enact laws with provisions that hinder, more than they protect, the largely constitutionally guaranteed and

internationally recognized right to freedom of information. In the same vein, there must be a balance to ensure that private and confidential information is protected from public access.

A good way to ensure that access to information is not abused is to have separate data privacy laws that provide specific descriptions of what kind of data should not be made available to the public. This is important for effective open government as noted by OECD, which includes data privacy or data protection laws as one of the indicators for effective open government.

Data protection laws control the manner in which personal and private information is used and stored by organizations, businesses and the government. It is apparent that a move towards open cultures in different spheres of life and governance may threaten private and confidential information; thus, data protection laws would ensure that the implementation of open government and OGD does not jeopardize personal and private information.

Under data protection laws, institutions to which data are released must note that they have a responsibility to hold the data within certain social and legal boundaries. Accordingly, these laws place limitations on how data are used so that the right granted under laws and initiatives such as freedom of information and OGD will not be abused. Nevertheless, sometimes, there are conflicts between data protection laws and open data laws, such as with the United Kingdom's Data Protection Act, which protects doctor-patient confidentiality, and the Health and Social Care Act 2012, which establishes a database for the health information of patients.

Generally, personal information such as that relating to ethnicity; political and religious beliefs; health; sexual health and orientation; and criminal records, where they pertain to specific individuals, will not be available in the "open" category and will be accessible to third parties only under legally permitted circumstances. Under the model law on access to information in Africa, third parties are allowed to apply for review of decisions allowing the release of their personal data, or to appeal the release of such data.

While freedom of information is a core aspect of open government, the Government of the United States, which passed its Freedom of Information Law in 1966, notes that the introduction of open data requirements in the supply of public service information would eliminate or at least greatly reduce the need for freedom of information laws (Orszag, 2009, p. 2). This is the case because freedom of information laws require citizens to make requests and thus build bureaucracy around the exercise of that right. And under open laws and policies, such data or information are usually made available and accessible without charge and without the need to request or follow any administrative process. So, while freedom of information laws are an imperative in most open government implementation programmes, the real objective is for citizens to have access to public service information, and OGD provides a better and more accessible means of doing that. Accordingly, an important legal framework that can be put in place for the implementation of open government is the introduction of open data laws to obligate governments to share certain public information openly without requiring citizens to request such information. This is where legal and policy frameworks for OGD become an important part of the legal and policy framework for open government implementation.

## 2.4 Legal and policy framework for open government data

OGD initiatives stress the need for governments to make data available and accessible without citizens having to request them, as is the case with the freedom of information regime. It removes the delays and bureaucracy that may be experienced when dealing with the processes required under freedom of information laws. "Openness" therefore makes information available to those who need it simply by making basic searches, without having to do more.

Governments, as a key producers, holders, and users of data, have the ability to develop the legal and policy framework for opening up significant amounts of data to the public, as well as set the example of opening data (McKinsey, 2013). The policy framework for OGD has more to do with the means of releasing data and making them

accessible than with the objectives. This is an important difference between open government and OGD. While open government focuses more on the purpose of the data or of making the data available, OGD focuses more on the means of accessing data. The indicators for OGD are as follows:

- Data must be complete
- OGD must comprise raw/primary data
- The data must be released in a timely manner, not just once, but as changes and developments happen
- OGD must be accessible
- Data must be machine-readable
- Access must be non-discriminatory and therefore open to all people and classes of people
- Access must be non-proprietary
- OGD must be licence-free or released under an open licence.

([www.opengovdata.org](http://www.opengovdata.org)).

Given the above, the policy framework for OGD must ensure that laws, policies, activities, and institutions are set up to ensure that the above-listed principles are applied in relation to OGD. The 2009 Open Government Directive of the United States Government, for example, seems to place significantly more focus on how data are made available than why. The Directive mandates sharing of information using the internet and in open formats and recognizes the potential of technology for open government. Accordingly, the United States Government's implementation of open government invariably incorporates the implementation of OGD and thus seeks to ensure that the provision of government data is in line with the above indicators. For reasons discussed below, this might not be a feasible option for African countries.

Nevertheless, given the wide reach and increasing importance of new technologies in daily life and global processes, it is important for African governments to prioritize OGD in their open government implementation. The policy framework for OGD, which should be in line with meeting the above indicators, would include a

broad framework for making government data or public service information openly available by introducing and encouraging laws, policies, institutions, activities and collaborations that are in line with the above indicators or facilitate the promotion of those indicators. Examples include open data laws, which mandate government or government-commissioned institutions to provide public data in open formats. The recently passed United States Digital Accountability and Transparency Act (DATA) mandates all government institutions and agencies to publish their budgetary matters online in open format. Open data laws are particularly important for the implementation of open government because they mandate governments to release specified data that are important for the promotion of the transparency, accountability and participation objectives. These laws not only say what data should be released, but mandate that the data be released in open formats and under open licences so that citizens have the most complete and updated version of government-held information.

Freedom of information laws and open data laws have similar objectives, both seeking to make government-held information accessible by citizens. However, open data laws make OGD the main tool through which this is done. They not only state the objective of information access but the format in which the information is expected to be released by government institutions. Open data laws make the information holder responsible for ensuring that the information is available, while freedom of information laws make the information holder responsible for providing information requested by the citizen; thus, the latter place some responsibility on citizens to demand information before it can be released to them.

Other kinds of legislative intervention would include data laws such as data protection laws that set the standard for making data available and keeping private data out of the public reach. In order to ensure that the transparency, accountability and participation objectives of open government are achieved, governments can introduce laws that compel the release of data relating to public spending and other budgetary matters, assets disclosure, public service, and so on, in open formats.

With regard to institutions, governments in Africa can either create new departments in already existing government agencies to handle issues relating to the use of technology and open formats to implement open government, especially through the provision of public service information and engagement with citizens. In Uganda, the Government set up the National Information Technology Authority (NITA) in 2009 to implement its information technology transformation agenda in all areas of its economy, including governance. The agency is expected to promote the development of IT infrastructure for use in enhancing transparency and accountability, among other things. The institution, established by an Act of Parliament, is an important part of the legal framework for OGD in Uganda.

In addition to using technology to provide information and encourage participation in government, a major feature of OGD is using these technologies to encourage innovation by allowing citizens to share, adapt or modify and reuse the data that are made openly available: this must be encouraged by introducing open licensing of government data. Information and data are intellectual property which confer rights on the creators or compilers of such property. Accordingly, third parties are only entitled to limited use of data compiled or produced by others. Copyright laws protect the rights of creators and limit the use of eligible works. This would make important modification of copyright laws and related policies necessary for the implementation of OGD, which requires that third parties be permitted to use, reuse, adapt, or modify government data. This is known as open licensing. Open licences allow third parties to exercise otherwise restricted rights that are usually available only to copyright owners.

#### **2.4.1 Copyright and licensing regime for open government data**

Copyright is intended to promote the creation of original works by giving authors control of, and the freedom to profit from, their work. Although copyright gives the creator of an eligible work exclusivity over that work, copyright law usually recognizes certain limitations as it seeks to strike a balance between private enjoyment of the benefits of creativity and public access to and

enjoyment of creative works. Consequently, it allows for what are deemed “fair” exceptions to the creator’s exclusivity of copyright and gives users the right to use, reuse, reproduce, adapt, modify, or distribute copyrighted material under carefully constructed exceptions.

Clearly, copyright laws create restrictions on the ability of the public or private sector to share information freely, especially as copyright law applies as a default to original and derivative material, unless otherwise stated. Any use or reuse beyond the legally recognized exceptions will attract a statutory fee, unless the creator has assigned his or her legally recognized rights to another or granted another permission to exercise those rights. Permission is usually granted by issuing a written licence which clearly defines the nature of the rights that the grantee of the license may exercise in relation to the licensed work.

Licences are usually personal agreements between the creator of the work and the prospective user, and their terms and conditions are usually provided in express (written) communications that depict the intention of the parties. “Open” culture advocates public licences known as open licences that serve as an agreement between the copyright-holder and the prospective user of an eligible work. Open licences are published in the eligible work so that the prospective user does not have to enter into a written agreement with the copyright-holder but relies on the terms of the licence that comes with the work. Accordingly, an open licence accompanies the protected work, so that prospective users of such works will be aware of the permits and limitations that the copyright-holder has placed on the work. There are different types of open licence and different organizations that administer, publicize and promote their use. One such organization is Creative Commons.

The Creative Commons licence is one of the more widely used open licences. Creative Commons is a non-profit organization, which aims to facilitate the legal sharing of creative works. It was created in 2001 and provides a number of copyright licence options to the public, free of charge. These licences allow copyright holders to define the less restrictive conditions under



which others may use their works and to specify what types of uses are acceptable. A general Creative Commons licence outlines the rights the copyright holder is willing to waive and enables the general public to use such works more freely. The licences may be ported or unported. A ported licence is modified to suit the copyright laws of a particular country, so that it is enforceable in the courts of that country. The unported licences are based on general international intellectual property law and are used in countries where the licences have not been ported in line with domestic intellectual property law. Egypt and

South Africa are the only African countries with ported Creative Commons licences.

In addition to a public domain licence, there are six general Creative Commons licences available to creators of eligible works. These licences are based upon stipulations by the copyright holders as to whether they are willing to allow modifications to the work, whether they permit the creation of closed works, or whether they are willing to permit commercial use of the work. The table below describes general Creative Commons licences.

**Table 4: Creative Commons licences**

Licence code	Licence title	Licence description
CC0	Public Domain Licence	This licence places the work in the public domain free from any copyright protection, and entitles users to exercise all the legally recognized rights in relation to such works. This usually applies to works for which the copyright protection has lapsed and some works provided by public sector institutions.
CC BY	Creative Commons Attribution Licence	This licence allows the user of the licensed work to exercise all legally recognized rights in relation to the licensed work, subject to attribution of the creator of the original work.
CC BY SA	Creative Commons Attribution Share Alike Licence	This licence allows the user of the licensed work to exercise all legally recognized rights in relation to the licensed work, subject to attribution of the creator of the original work and an obligation to release any resulting creation from the licensed work with a similar open licence.
CC BY NC	Creative Commons Attribution Non-Commercial Licence	This licence allows the user of the licensed work to exercise all legally recognized rights in relation to the licensed work, subject to attribution of the creator of the original work and an obligation to not make commercial use of the work or any modification or derivative of the work.
CC BY ND	Creative Commons Attribution Non-Derivative	This licence allows the user of the licensed work to exercise distribution rights in relation to the licensed work, subject to attribution of the creator of the original work and an obligation to leave the work in its unchanged version; so, there are no modification or adaptation rights attached.
CC BY NC SA	Creative Commons Attribution Non-Commercial Share-Alike Licence	This licence allows the user of the licensed work to exercise all legally recognized rights in relation to the licensed work, subject to attribution of the creator of the original work; an obligation to not make commercial use of the work or any modification or derivative of the work; and an obligation to release any resulting creation from the licensed work with a similar open license.
CC BY NC ND	Creative Commons Attribution Non-Commercial Non-Derivative Licence	This licence allows the user of the licensed work to exercise distribution rights in relation to the licensed work in its unchanged version, subject to attribution of the creator of the original work and an obligation not to make commercial use of the work.

Source: <https://creativecommons.org/licenses/>.

Apart from Creative Commons licences, there are other licences which grant users varying degrees of freedom to use, reuse, distribute and even profit from the creative material of others. Most of these licences fall under the above categories. Creative Commons has the most comprehensive licensing systems and is widespread enough to be recognized in different jurisdictions. Countries such as Australia, Kenya, the Russian Federation, the United States and a host of others use Creative Commons licences to release public service information. Governments wishing to freely provide information will be required to determine the conditions under which both commercial and non-commercial entities may interact with public sector information. Some governments create their own licences to use for public service information. The most important thing is to provide widespread awareness about the existence of the licences and the kinds of rights they grant data users so that citizens can feel comfortable and safe when they use or interact in any way with government data.

By providing the right laws and policies to encourage “openness” in government, African governments will create the enabling environment to create a culture of openness and engagement in government. Although it is not only by providing OGD that open government can be implemented, the former contributes significantly to achieving the objectives of the latter. Accordingly, exploring ways to introduce OGD through relevant laws and policies is very important. In addition, African governments must also understand how open government can be implemented by tapping into the technical framework for OGD, which involves the use of technology for innovative release and use of data.

## Section 3

### 3.1 Use of technology and innovation in the provision of open government

In order to implement open government, with a focus on OGD, it is important to note the important role of technology, since core components of OGD require technology-related prerequisites such as machine-readability. As noted above, OGD is really about processes, and technology is at the core of these processes; it involves the use of (new) technologies to make data available. Accordingly, paper-based data would not qualify as OGD regardless of how open they are.

OGD is predominantly centred on the provision of data through ICT, particularly through the Internet. The objective is not why the data are made available but how they are made available. The two important questions to ask are: how the data are made available, that is, in what physical format, and; how they are made accessible and usable, that is, under what licence, permits or instructions to the user. The first question can be answered with regard to how technology is used to implement open government and OGD, while the second can be used to answer the question of how the release of information in certain formats encourages innovation.

### 3.2 Technology and open government (data)

ICT allows for fast and widespread dissemination of information as well as interactive use of information. These are qualities that make it attractive for the implementation of open government. By using ICT to provide data to citizens and improve service delivery, governments are able to reach a larger number of people within a shorter period of time, especially when compared to the speed and reach of paper-based communication and data provision. Accordingly, in order to implement open government more effectively and enhance participation and engagement, while also making data available across a wider spectrum,

governments must invest in new technologies and infrastructure such as Internet bandwidth, data storage capacity, hardware, and the human capital to drive the processes using these technologies.

The use of technology to make data available provides huge volumes of data and makes them available to users based on their search preference without having to go through any request procedure or other bureaucratic process. The data are arranged in data sets, which are based on the relevant area of impact, such as business, health, climate, education, etc. There are currently more than one million data sets provided in open formats by governments across the world (McKenzie, 2013). These open data experiences have led to increased participation in government, as millions of users with Internet access in developed countries can access government information and provide feedback on such information. For example, in the United States, governments saved millions of dollars from releasing budgetary and procurement information in open format when citizens assessed the data and were able to identify opportunities for cutting costs (McKenzie, 2013, p. 6). This kind of transparency that makes governments accountable and encourages citizen participation is more likely where the data are made readily available and in easily searchable formats that can be accessed by users without any discrimination as to status.

Accordingly, ICT provides a cost-effective platform to increase transparency, participation, collaboration and accountability in public administration. There is a collective realization that the Internet has the ability to muster and reach a large number of people with what information there is to give and collect. It has been stated that a twenty-first century government must be an open government that “shares resources that were previously closely guarded; harnesses the power of mass collaboration - a truly integrated and networked organization” (Lathrop and Ruma, 2010). The Internet is the most effective tool for making this possible.

In addition, open government data also encourage innovation and improved performance in government service delivery. By providing

open data, governments can encourage citizen participation and enhance e-government initiatives, which seek to promote efficiency, effectiveness, inclusion and sustainability in government institutions (UNDESA, 2012). This would ensure that citizen participation is enhanced and that governments are better able to define public goals and priorities by engaging with the citizens they represent. This, in turn, leads to increased legitimacy for governments.

Provision of open government data ensures that there is wider access to information for citizens and reduced or no bureaucracy in accessing that information. Accordingly, it would take less effort for citizens to access the information that is required for them to hold governments accountable and to participate in governance, as well as to collaborate with government agencies in introducing innovative services by using and reusing data. In order to promote OGD implementation, it is important to plan the proper technological framework that will be employed in the process, and there are different types of devices and processes that can enhance implementation.

### 3.2.1 Big data

The volume of information held by government is vast, and proper storage is crucial for reasons such as data security, building an institutional history and repository, among others. Accordingly, the move towards open government and OGD necessarily implies that a means of gathering, managing, storing, and analysing large volumes of data must be found. Governments may provide data in digital formats or in non-digital (paper, videos) formats. There are various reasons why digital formats are prepared, such as longevity, safety, ease of access and management, and minimal physical space for storage. However, production and storage of digital data requires immense technological infrastructure and human expertise.

Voluminous digital data sets are known as “big data”. The term “big data” refers to data sets that are voluminous, diverse and timely” (McKinsey, 2013, p. 4). The main feature of big data is that they cannot be manipulated or interrogated with standard tools. Their usefulness lies in the fact that

they create the basis for providing comprehensive analyses and knowledge-based predictions that can be used by governments, businesses and individuals. Big data provide a “way of creating robust and credible knowledge that may serve as a basis for framing a problem and for the craning of future scenarios” (Flyverbom and Gaston, 2013, p. 5). Big data involve the convergence of data from different sources in order to provide a complete or at least near-complete information base that is raw and unprocessed. Big data allow users to create their own predictions and generate new knowledge from a vast pool of information. This process is digital and requires the use of available digital data sets and search engines such as Google, Yahoo, Bing, and even social media sites like Facebook and Twitter. The data are collected from a diverse range of sources and they openly available for users to generate processed information and knowledge.

Big data are important because they provide the opportunity to use technology to collect, manage, and analyse the vast amounts of digital data created daily from different sources. Not all big data are open data, but open data can be derived from big data, and our ability to manage big data can impact how we manage and analyse open data (McKinsey, 2013). Accordingly, understanding the usefulness of big data is an important factor for making data available and would require important technological and technical know-how to improve the level of technology available for the purpose of making data accessible by citizens. It will also expand opportunities for development created by innovative use of data – not just open data but big data as well.

### 3.2.2 Data storage

Generally, local data are stored in the central processing unit of computers, with fast and expensive storage facilities being held near to the central processing unit and less expensive storage being held farther away from the local computer. However, in dealing with large data, which must be accessible by several hundreds or thousands of people, data storage must go beyond storage on local machines or even local file servers. Owing to the size, big data are traditionally stored in data centres, which are large

data warehouses set up to house and manage significantly large data sets. Data centres require significant resources for their construction and maintenance, and this includes independent and uninterrupted power supply, set temperatures, large physical equipment, and complex data connections. The infrastructural investment for data centres is high and hence most of the data centres in the world are located outside Africa.

In Africa, the infrastructural challenges such as unreliable power supply, cyber insecurity and the consequent absence of enough large data centres affects the way in which voluminous data sets can be effectively stored and managed to provide OGD and facilitate its use by citizens. One of the best ways of circumventing the challenges that arise from inadequate storage infrastructure, poor technology infrastructure, and limited budgets for technology and innovation is the system known as “cloud computing”. This essentially refers to the sharing of resources over a computer network and describes a variety of computing concepts that involve several computers connected through a communication network such as the Internet (Carrol et al, 2012). The basic pillar of cloud computing is the concept of converged infrastructure and shared services. Cloud computing provides the ability for individuals, corporations and government entities to disaggregate their computing requirements and run a programme or application on many connected computers at the same time. In other words, “it enables users through the Internet or other digital networks to access a scalable and elastic pool of data storage and computing resources as and when required” (UNCTAD, 2013).

Cloud computing servers are often supported by virtual hardware (cloud servers), simulated by software running on one or more real machines. Such virtual servers do not physically exist and can thus circumvent the need for government departments in Africa to invest heavily in physical servers that require upgrading and maintenance. In addition, virtual servers can be scaled up or down depending on government needs and without affecting the end user. In common usage, the term “the cloud” is essentially a metaphor for the Internet and is also used to refer to software, platforms and infrastructure that are sold as a service, i.e. remotely over the Internet.

Open government initiatives in Africa can rely on cloud storage, where data are stored in virtual storage facilities hosted by third parties, and this space can be bought or leased from third parties. The third parties thus bear the risk for maintaining the integrity of the storage system, which means that customers avoid capital expenses related to purchasing storage hardware. The characteristics of cloud storage are the same as those of cloud computing, and they are agility, scalability, elasticity, multi-tenancy, and availability, both on and off-premises.

There are different ways through which African governments can use technology to provide government data in open formats and ensure that the data are accessible to citizens in furtherance of transparency, accountability and participatory objectives. These include the use of data portals, mobile technology, and ensuring interoperability of the platforms used to provide and access data.

### 3.2.3 Data portals

Data portals are online platforms that contain data sets in searchable form and arranged based on content. The portal will usually contain diverse data sets that may be from several different sources, which can be accessed from a central portal for free. The features of a data catalogue should include the functionality for feedback, including methods for requesting additional data, a dash board and, where possible, lists of applications built with different data sets. The way in which a data catalogue works is that the national data portal will be the central place for the retrieval of all data, but this will not replace the decentralized publication of data by public agencies and regional or local authorities. The central data portal may be designed in a manner to “harvest” or collect the data produced by all agencies and authorities and host the data on the central catalogue.

National data portals provide the most effective means of sharing data. They cover a wide range of data sets that can be published online in open format and made available to the public with opportunities to interact and provide feedback. There are presently more than forty countries with open data platforms, and more than one million open data sets made available

by governments worldwide. The United States Government publishes more than 90,000 data sets on its national data portal and the United Kingdom data portal received more than a million views during the summer of 2013 alone (McKinsey, 2013). Accordingly, data portals can be an immensely useful resource for making government data available to a significant section of the population with access to the Internet.

Data portals in African countries like Ghana, Kenya, Nigeria and the United Republic of Tanzania have hundreds of data sets for citizens, but there are concerns about how the portals can be better maintained and, more importantly, better utilized by citizens. For instance, in Kenya, where the first African open data portal was launched in 2011, there have been challenges trying to get information from the Government because of a poor information culture based on the country’s political history (Majeed, 2012, p. 3). On the other hand, citizens have not been able to access the information made available on the portal owing to the lack of Internet availability in many parts of the country, and the limited number of data sets also means that many of the data sets that citizens would like to access are unavailable on the site (Majeed, 2012, p. 16; Mahihu, 2013). This means that the portal has not effectively helped to provide opportunities for increased citizen engagement with the Government, nor has it improved accountability and transparency.

In order to provide more information to a wider group of citizens, it is important to use data portals, but African governments must change harsh government policies towards information-sharing and provide better infrastructure. In addition, governments must take advantage of other available methods of dissemination that will allow greater access by a greater number of people, such as through mobile phones.

### 3.2.4 Mobile technology

Despite regional infrastructural challenges, advancements in the use of the Internet, mobile telephony, and computers have grown considerably in Africa, to the extent that it has been stated that Africans have better access to technology than to water and sanitation. With

more than 80 per cent of Africans having access to mobile phones, Africa is the fastest growing and second largest mobile phone market in the world (African Development Bank, 2014, p. 54). Accordingly, mobile devices provide a widespread platform through which a significant number of African citizens can be reached. Governments seeking to move towards open government through OGD can exploit this situation, particularly when it comes to making information available on the Internet or in digital formats.

Although Africa has the lowest number of broadband subscriptions of any region, at 0.3 per cent in 2013, the continent has a much higher number of mobile telephone Internet subscriptions, at 10.9 per cent in 2013 (International Telecommunication Union, 2014, p. 4). In other words, Internet access from mobile devices (such as smart phones and tablet computers) in Africa, by far exceeds Internet access from fixed-line services on desktops and laptops. In some countries, as many as 90 per cent of internet users have access on their mobile devices (African Development Bank, 2014). This means that the provision of OGD must be made on platforms that are mobile device-friendly. These data must be accessible, readable and usable from a mobile device. Thus, open government portals must be designed with mobile platforms in mind. Compared to desktops and laptops, mobile devices have the disadvantage of “slower download request/response times, the latency of over-the-air data transmission” (Zakas, 2013) and this should force developers to rethink web applications created for desktops so that they are more suitable for use on mobile devices.

African governments must also consider the use of mobile apps as the platform for disseminating public service information, given that in 2013, the time spent on the use of mobile apps exceeded the amount of time spent on the mobile web. To clarify, in 2013, mobile users spent 86 per cent of their time on the phone using mobile apps and 14 per cent using mobile web browsers (Khalaf, 2014). This creates a significant opportunity for reaching a large number of citizens, so governments would have to ensure that mobile apps are included in any open government approach that is used in Africa.

A good example of the use of mobile technology to share information is Esoko, a web-based information-sharing app that provides farmers and other stakeholders in the agricultural sector with text messages containing relevant data about sales and customers, market prices, and inventory. The app was developed in Ghana and is now used in other African countries (McKinsey, 2012, p. 44).

The use of mobile apps in this manner would make up for many of the cost and other access challenges faced with laptops and computers, which most citizens have limited or no access to and may not know how to use. In rural communities, mobile phone coverage is widespread as telecommunications networks spread fast across the region. As such, mobile apps can provide language options, audio services and voice activation for the citizen population with limited or no formal education.

### 3.2.5 Interoperability

Interoperability has been defined as “the ability to transfer and render useful data and other information across systems... applications, or components”. (Gasser and Palfrey, 2007, p. 4). It refers to the ability of software to operate across different systems by exchanging data and files. This expands the level of access available to users and providers of content because it means that the content is available to more people across different systems. For example, a data file uploaded in exclusive format will only be usable on a particular software, which would mean that users would have to own and understand that software in order to be able to access the data. However, where the process is interoperable, the data will be available for use on different software and data providers can release their content to a wider range of users. This kind of expanded access is particularly important for the open culture that is developing in the ICT world because of the importance of access to “openness”.

Consequently, the absence of interoperability is a significant barrier to OGD and a move towards a more entrenched open government, especially where, as is usually the case, the release of data is devolved to different agencies and sub-units of government. This would mean that there

is limited opportunity to use the different files or data provided across systems and users cannot combine their activities across different platforms. On a more basic level, the failure to make systems interoperable would create unnecessary inconvenience to those citizens who wish to access and use government data. The ability to operate across different platforms or systems also encourages and promotes innovation, and this is a significant objective of OGD.

### 3.3 Innovation in open government data

A significant aspect of open government is participation and engagement and, as discussed above, OGD encourages the use of interactive technology to provide and access information. The provision of data in such large volumes and such widespread reach under open licenses that allow users to reuse and adapt the data without restraint, or with limited restraint, will encourage innovation. Data are regarded as raw material which, if provided by government, can be used by individuals, civil society, and business people to serve communities for civic or commercial purposes. Open licences allow users to transform the data to useful products and services without having to worry about the legal implications of using data or having to contact the providers of data to negotiate and agree on the terms and conditions of a copyright licence.

The provision of open data will spark innovation and provide an incentive for private individuals and organizations, that are unable to afford to provide that level of data on their own, to access the data freely and create new services and products with it. Research by McKinsey Global Institute shows that open data provided in seven different sectors (consumer finance, consumer products, education, electricity, health care, oil and gas, and transportation) can raise between \$3 trillion and \$5 trillion annually (McKinsey, 2013, p. 9). This happens when civil society groups, civic hackers, entrepreneurs, and interested citizens take the data that is released by government and use it to provide useful services to the public, which can improve consumer experiences.

This kind of innovative use of data can also create political capital. A good example is Ushahidi, a platform introduced in Kenya after the outbreak of post-election violence in 2008. This crowdsourcing platform was created to collect and disseminate information about violence in different areas to keep citizens informed and provide records of incidents (Majeed, 2012, p. 4). Where there is a closed culture in respect of information sharing and data are locked in exclusive formats, this would mean that citizens and society in general cannot use the data for productive purposes, which could be economic, political, social, or cultural. For example, the provision of information about school locations and performances can help governments direct much-needed resources to the areas that require them the most and would help educators measure their performance better. Parents are also able to make decisions about residence based on information about educational services (McKinsey, 2013).

Although innovation, particularly in the present global economy, is defined in monetary terms, it has significant non-monetary values.

## Section 4

### 4.1 Partnerships required for the effective implementation of open government data

Governments are invaluable to open government and OGD projects in two very important respects: they are in many cases the source of public service information and they are also the beneficiaries of open data. Apart from the fact that governments are central to the provision of government data, they also use the data and the responses to the data to provide better governance solutions for citizens. The various capacities that citizens inhabit in this relationship, as demanders and users of data, create their own tensions, but suffice it to say that they are crucial to the success (or failure) of open government and OGD projects, especially when it comes to defining what may be termed the “theatre of openness”. This is one reason why data protection laws must be strengthened to protect private and confidential data so that openness will not become an obstacle to open government and OGD implementation (See McKenzie, 2013, p. 3). In addition, open data laws are introduced to expand the boundaries of openness, and governments must define these standards by constant interaction with different groups in society.

There are three groups of users who can form partnerships with governments to ensure that OGD implementation achieves the desired results of enhancing government transparency, accountability, and participation, as well as innovation: citizens; civil society; and the private (business) sector.

### 4.2 Citizens

Citizens are the main target of open government initiatives. As a political phenomenon, open government is expected to make governments more responsive to their citizens by assessing and using relevant information, and by engaging with governments on the content of this information. Whether or not citizens demand open government, it is presented as a means to make government serve them better. Hence,

the open government partnership must begin with governments and their citizens, as it is the citizens who must set the main objectives of open government and determine the indicators that are important to them. In other words, it is citizens (and civil society) who are primarily able to place demands on their governments for greater accountability, transparency and responsiveness.

Unfortunately, this is not always the case. The open government movement, like many other governance-related movements before it, was borne within certain circles which defined the goals and objectives of the movement and the best means of achieving them. Accordingly, citizens in some parts of the world, including Africa, have not been part of the discourse to set these objectives and determine what demands should be made of governments and how goals should be reached. In addition, as the demanders of open government, historical and cultural legacies may mean that citizens do not place the required demands on their governments to move to more open practices. For example, many Africans who live in nascent democracies and still have to deal with significant social, political and economic challenges, are not educated enough to make demands or use government data to their advantage (Hogge, 2011, p. 32). This is so for a number of reasons, not the least of which is the political history of governance in, and the economy of, African states.

In Africa, traditional media remains an important source of information, particularly government information. Accordingly, even in countries like Kenya where there has been significant progress in encouraging the use of new technologies and ICT for open processes, traditional media sources such as radio and television still account for the basic source of information for more than 70 per cent of users (Mahihu, 2013). This means that there is very limited room for interaction with the Government regarding the kind of information that is provided and there are limited opportunities to respond to information that has been provided. Nevertheless, traditional media provide some opportunities, which ordinary citizens can identify with and participate in. A good example is the local radio programme in Nigeria called *Radio Brekete* that allows citizens



to make complaints about public officials and sometimes confront those officials on the air (ILO, 2014).

These opportunities, and other avenues such as town hall meetings, provide traditional venues for engagement with citizens but their reach is limited. While radio shows are aired to a wide section of the population, they do not provide the opportunities to communicate, store or record, use and reuse data that can be provided by new technologies. For example, mobile apps can provide audio and audio-visual communications in formats that can be accessed and used by citizens who are unable to read and write, an advantage that some traditional media such as television and radio have over readable formats. Mobile networks in countries like Kenya and Nigeria provide services in local languages to encourage more widespread use by a significant section of the population in these countries where English is recognized as the formal language in schools and public institutions.

Because of the social, economic and political conditions in many African countries, the use of new technologies for innovative purposes, whether social, economic or political, is still very limited. OGD platforms in countries like Ghana and Kenya are largely underused, for several reasons, not least because citizens must learn to make demands and be educated about their role in the process (Omollo, 2012; Brown, 2013). Fewer than 15 per cent of Kenya's population have accessed its open data portal. Figures like this show that while there is significant potential for technology in open government, it must be properly harnessed, the right partnerships must be built, and the right capacities must be developed.

Accordingly, governments must form partnerships with citizens who will use the portals in order to educate them about their role in using the data provided, in making demands for additional data sets, and in ensuring that they actively engage with government in the development of the OGD tools. Where citizens are not involved in the process of determining what data are made available, they will not use the data effectively to ensure that the objectives of open government are met. Hence, the data that are provided in

OGD implementation must be relevant and timely, so that citizens can engage actively and as such participate in government. Thus, citizens become beneficiaries of effective open government systems.

As the beneficiaries of OGD and open government, citizens may not adopt or utilize OGD and the project may never gain the traction required to be of value, unless they have been made part of the process through consultations, partnerships and collaborations that make their input valuable to the final product. Accordingly, the role of citizens in implementing OGD cannot be underestimated, just as they are a crucial part of the discourse on open government as the beneficiaries of the final product: an open government.

### 4.3 Civil society

In countries where the open government movement has grown organically, so to speak, civil society has been instrumental to the impetus and growth of the movement. It has been highlighted that the push for governments to become more open and transparent gave impetus to the demand for government to release more open data (Hogge, 2010, p. 29). These groups are particularly important in countries where the larger citizenry is not educated enough to engage meaningfully in the creation of OGD frameworks and tools. They usually take over the role of negotiating the terms of open government and OGD with the government on behalf of a citizenry that may be ill equipped to do so. These groups include non-governmental organizations involved in the promotion of democracy, human rights and good governance and communities of technologically-educated and equipped people who move their penchant for technology into the public sector. A good example would be the civic hackers that have become increasingly active in many parts of the world. These people use ICT to make significant contributions to public life by addressing particular challenges and using data to provide solutions.

In such countries as Kenya, the United Kingdom and the United States, civic hackers had begun to take some (restricted) public service information and were making it available and useful to the

public through sites such as [www.GovTrack.us](http://www.GovTrack.us), launched by an American student in 2004, and [www.TheyWorkForYou.com](http://www.TheyWorkForYou.com), also launched in 2004 by a group of volunteers in the United Kingdom, as well as [fixmystreet.com](http://fixmystreet.com), also in the United Kingdom. Similarly, in Kenya and Nigeria, [Ushahidi.com](http://Ushahidi.com) and [yourbudgit.com](http://yourbudgit.com) were established in 2008 and 2011, respectively, both with the aims of harnessing technology to improve civic engagement. In addition to technology-focused groups, other groups focused on openness and transparency supported the work of civic hackers and consolidated the grassroots movement around open government and open data.

Civil society's role in an open government initiative in Africa may of course not adopt the format that their engagement took in the United States and Europe, given that Africa does not have as many powerful and local interest groups devoted to open government and, particularly, to OGD; although, given the traditional and perceived opaqueness and corruption in the African public sector, there are several organizations devoted to various aspects of public sector accountability and reform, which may be recruited into an open government and OGD movement, given the similarities in their objectives. Some of these groups are international organizations with significant local representation, such as the Open Society Foundation, whose Open Society Justice Initiative and Open Society Initiative in different subregions of Africa (West Africa, East Africa and Southern Africa) were instrumental to the introduction of freedom of information laws in many African countries.

Thus, similar to the capacities in which ordinary citizens participate in an open government and OGD initiative, civil society also inhabit different spaces, which gives an indication as to the roles civil society will play. Thus, civil society may in most cases provide the impetus for an open government and OGD movement, where its members engage in civic hacking and repurpose data for public utility. Second, civil society has a powerful voice in demanding accountability and transparency in Africa. As such, its members would be competent to demand useful data that will provide meaningful benefit to citizens. Third, civil society often disseminates data, not

only through the medium of technology, but also through traditional advocacy campaigns that are available to and accessible by citizens from across the different strata of society. The *Radio Brekete* initiative was introduced in Nigeria by the Open Society Initiative for West Africa (OSIWA).

In order for governments to engage meaningfully with citizens and to drive their openness campaigns more forcefully, they must engage with civil society groups, which have, in many cases, become the voice of ordinary citizens. Owing to high illiteracy levels in African countries and the power distance between governments and their citizens, civil society groups have become a powerful force in bridging the gap between the rulers and the ruled. Accordingly, governments must work with them to engage more meaningfully with citizens.

#### 4.4 Private (business) sector

The principles of open government are democratic in nature and provide an environment in which private sector initiatives flourish for the sustainable development of a nation. But the private sector cannot be reliably established without information (data and education) or be enabled in any sustainable way without public sector information (open government data). Invariably, organized information or data are “the raw material of the 21st Century and a resource for a new generation of entrepreneurs” (Maude, 2012).

The provision of open government data can be a significant source of income for private sector businesses, and it encourages innovation among entrepreneurs, particularly young technology-minded entrepreneurs. It can also improve performance in sectors such as agriculture, transportation, and education. For example, Climate Corporation, an American company that specializes in collecting and collating data on weather and agriculture, was bought for almost \$1 billion in 2012. The use of the Global Positioning System (GPS) and mapping of data by companies to provide services to consumers produces an estimated income of \$190 billion annually (McKinsey, 2013). When data are made openly available, entrepreneurs can use it to provide services to the public, thus creating

jobs and generating income and contributing to GDP growth. Significant amounts of data are in the possession of governments and public institutions and by making such data available and accessible, government can encourage innovation among citizens.

Engagements, collaborations and partnerships with private businesses would help governments determine what types of datasets would be necessary or important for providing public services that can be income-generating for businesses and productive for society at large. In addition, the private sector can help fund the provision of OGD because of the advantages that the data held by governments can provide to private businesses. Harnessing the vast resources available from the private and public sectors would make for a mutual exchange of resources that would promote social, cultural, economic and indeed political development.

## Section 5

### 5.1 African experience in open government implementation

As noted above, several African countries have joined OGP as part of their commitment to implement open government and promote open government principles within their administrations. Some governments that have not joined the Partnership have, on their own, taken steps to ensure that they actively work towards achievement of the transparency, accountability and participation objectives, sometimes by providing OGD and engaging actively with citizens. The countries reviewed in this study include Morocco in North Africa; Cameroon in Central Africa; Ghana in West Africa; Kenya in East Africa; and South Africa in Southern Africa.

### 5.2 Morocco

The Government of Morocco is not part of OGP but has made efforts to promote open government principles and the achievement of the transparency, accountability and participation objectives. There are different areas of open government implementation where the government has been active in promoting the transparency, accountability and participation objectives. Some of these are discussed below. The Government does not have a known open government implementation policy framework, but it has undertaken several activities that are aimed at achieving the transparency, accountability and participation objectives, and it has also embraced OGD as a means of promoting the transparency, accountability and participation objectives, as will be seen below.

#### 5.2.1 Access to information

The Moroccan Constitution protects the right of access to information under a provision that has been described as “the first of its kind in the Arab world” (Almadhoun). Limitations to the exercise of this right under Article 27 of the Constitution include “assuring the protection of all which concerns national defense, the internal and external security of the State, as well as the private

life of persons, ... preventing infringement to the fundamental freedoms and rights enounced in this Constitution and ... protecting the sources and domains determined with specificity by the law". There is no access to information legislation in force in Morocco to provide details about how the right and its exceptions will operate, but there are efforts under way to enact an access to information law. In addition, there is a Press and Publication Act that confers on the media the right to access and obtain information, but there is no corresponding duty on the Government to ensure that such information is made available to journalists who request it.

### 5.2.2 *Accountability and budget transparency*

The Government of Morocco also has several laws aimed at curbing and investigating corruption in the public sector. These laws allow the government to use information for related investigations and disclose information about the outcomes of such investigations. A good example is the 1992 Parliament Investigation Committees Act. The country's Public Procurement Decree also imposes a duty on the Government to publish procurement information. These are some of the laws that make an effort to ensure transparency and accountability in government.

Morocco previously chaired the Arab Anti-Corruption and Integrity Network (ACINET). ACINET is an initiative of 18 Arab countries, civil society groups, and other institutions, that seeks to advance anti-corruption strategies in accordance with municipal priorities and international standards and good practices. As a leading member of ACINET, Morocco is committed to advancing the anti-corruption agenda in the region (see [www.arabacinet.org](http://www.arabacinet.org)).

The Ministry of Economy and Finance also makes budgetary information available to the public by publishing the Citizens' Budget on its website. The 2014 Citizens' Budget Bill and the Finance Bill 2014 (as approved by the House of Representatives as at November 20, 2013) are currently available on the website of the Ministry and can be accessed at [http://www.finances.gov.ma/Docs/2013/db/5445\\_budgetcitoyen201426.pdf](http://www.finances.gov.ma/Docs/2013/db/5445_budgetcitoyen201426.pdf).

The International Budget Partnership is a forum that provides assessments of the state of budget transparency in different countries. In doing this, the International Budget Partnership considers the publication of eight key budgetary documents in the countries under assessment. The availability of these documents is used to determine the indicators of the levels of transparency or otherwise of budgetary processes. A crucial consideration is whether or not the public has access to these documents. The documents are listed below, with indications from the Open Budget Survey 2012 stating whether or not the Government of Morocco published the relevant information. The Open Budget Survey is a biennial publication of the International Budget Partnership that determines budget transparency in different countries; the latest publication was the 2012 publication.

- Pre-budget statement, which provides a broad outline of the country's fiscal policy and a budget proposal before it is presented before the legislature for consideration and/or approval. This was not provided by the Government of Morocco.
- Executive's budget proposal, which sets out the revenue generation and expenditure plans or policy of the government. This was produced by the Government of Morocco.
- Enacted budget, which is the actual budget legally approved or authorized for revenue generation and expenditure. This was published by the Government of Morocco.
- Citizen's budget, which seeks to present government expenditure and revenue policies to the public in simple and non-technical language. This was published by the Government of Morocco.
- In-year reports, which provide information about the actual revenue, which can then be compared to the enacted budget. This was published by the Government of Morocco.
- Mid-year review, which provides an outline of the budget's effects during the

middle of a budget year. The Government of Morocco did not publish this document.

- Year-end report, which compares actual budget execution to the enacted budget. The Government of Morocco produced but did not publish this document.
- Audit report, which provides an independent evaluation of the government's compliance with the authorized budget in terms of revenue generation. The Government of Morocco published this document.

According to the International Budget Partnership, Morocco's Open Budget Index Score for 2012 was 38 out of a scale of 100. However, Morocco has one of the most transparent budgetary processes in the North Africa and Middle East Region, and is second only to Jordan whose Open Budget Index Score for 2012 was 57 out of a scale of 100 (International Budget Partnership, 2012b). However, the Partnership's assessment of Morocco is as follows:

Morocco's score indicates that the government provides the public with minimal information on the national government's budget and financial activities during the course of the budget year. This makes it challenging for citizens to hold the government accountable for its management of the public's money (International Budget Partnership, 2012b, p. 2).

The Partnership also made a number of recommendations to Morocco stating, among other things, that the country ought to publish the documents that are not currently available to the public, ensure the comprehensiveness of available documents, encourage public participation in decision-making processes on budgeting and consolidate legislative oversight functions over government expenditure (International Budget Partnership, 2012b, pp. 2-4). Morocco has recently taken some steps to ensure greater transparency in this area by, for instance, strengthening the legislature's capacity to regulate budgetary processes (Bloom, 2014).

### 5.2.3 Institutional framework

The Administrative Court, established by Law No. 41-90, is a regulatory institution for

ensuring transparency, accountability and citizen engagement, by virtue of its powers to compel the disclosure of information held by public bodies. In cases where public agencies refuse requests for information, aggrieved applicants may approach the Court. Thus, by exercising its powers of judicial review of administrative action, the Court serves as a regulatory body. The country has also established an Audit Court to audit regional and national accounts. The government has an Ombudsman's Office Act, which establishes the Ombudsman institution also known as *al-Waseet*. The institution seeks to advance the rule of law and democracy in Morocco. It is empowered to receive complaints about administrative bodies and conduct investigations concerning them.

The Ministry of Economy and Finance regulates open data by publishing budgetary information. It publishes citizens' budgets as a means of enlightening the public about budgetary processes and policies of government. The citizens' budget is published in non-technical language in order to make it accessible to those who may not necessarily possess the financial literacy needed to decipher technical information (International Budget Partnership, 2012).

The Ministry of Trade, Investment and New Technologies established the Open Data Portal as an expression of the e-government policy of the Government of Morocco.

### 5.2.4 Open government Implementation through open government data

Although Morocco is not a member of the Open Government Partnership, the country is committed to ensuring transparency and accountability in public life. There are no indications under Moroccan law as to the format in which public information is to be provided. It is only reasonable that the laws do not cover open data, because the principles of OGD are clear and mandate governments to provide data in open format and anything less would not qualify as OGD. Accordingly, where the law is silent as to format and allows the government to choose the format in which to provide the data, this will not constitute OGD, which requires clear legal and policy frameworks. Nevertheless, the Government has some OGD platforms.

Morocco's open government data portal, launched in 2011, is available at [http:// data.gov.ma](http://data.gov.ma). The portal was established by the Ministry of Industry, Trade and New Technologies, and represents the Government's main OGD initiative. It upholds the need to provide free and available data as a means of creating value in Moroccan society. Data and statistics for the portal are contributed by government departments and agencies. The idea behind the portal was to create a single platform which would provide users with government data and information in formats that facilitate the reuse of such data. The site is published under a licence adapted from the Open Database Licence of the Open Knowledge Foundation.

Information on the portal is organized into the following categories:

- Maps
- Education
- Employment
- Finance
- Health.

### 5.2.5 Copyright laws

Copyright protection, under Moroccan law, does not extend to the following documents and their official translations:

- Official legislative texts
- Official administrative texts
- Official judicial texts (article 2, Act No. 2-00 on Copyright and Related Rights).

The Moroccan Government's Archive Act created a public organ called the Archives of Morocco with the function, among others, of managing public records for administrative, scientific, social or cultural purposes (see article 27 of the law). Under the law, archives are defined as all documents:

- Irrespective of their date, shape, and material support
- Produced or received by any natural or legal person and any service or private or public agency in the exercise of their activity (see article 1).

## 5.3 Cameroon

### 5.3.1 Access to Information

Cameroon does not have a freedom of information law or a law that guarantees citizens access to official information. According to Freedom House, "the government does not generally make documents or statistics available to the public or the media", and journalists have been imprisoned for being in possession of confidential official documents (Freedom House, 2012). Cameroon, however, signed and ratified the African Charter on Human and Peoples Rights. It is noteworthy that article 9 (1) of the African Charter guarantees the right of every individual to receive information. Furthermore, the Constitution also protects the right to freedom of expression and the press but not the right to freedom of information, thus restricting the domestic enforcement of citizens' right to seek, demand and request public information. The 1996 Cameroonian Constitution also upholds the inviolability of the right to privacy of all correspondence. This right can only be restricted by judicial decisions.

### 5.3.2 Accountability and budget transparency

The Government of Cameroon has made some efforts towards combating corruption, but more may be required to establish a culture of accountability in the public sector. Corruption is a crime under the country's Criminal Code; the National Anti-Corruption Commission was established by decree in 2009 to combat corruption, while the Constitution was amended in 1996 to require the declaration of assets by public officials. A law was introduced to that effect in 2006 (Act No. 2006/3). The Extractive Industries Transparency Initiative (EITI) Board designated Cameroon as an EITI-compliant country in 2013, thus indicating that the country had met the set requirements for transparency, openness and disclosure in its extractive industry. With regard to budget transparency, Cameroon has not fared particularly well, when evaluated based on the standards set by the International Budget Partnership. With regard to the key budgetary documents expected to be made public by countries with transparent budgetary

standards, the result for the Government of Cameroon was as follows:

- Pre-budget statement: This was published by the Government of Cameroon
- Executive's budget proposal: The Government of Cameroon produced but did not publish this document
- Enacted budget: This was published by the Government of Cameroon
- Citizen's Budget: This document was not published by the Government of Cameroon
- In-year reports: This was published by the Government of Cameroon
- Mid-year review: This document was not published by the Government of Cameroon
- Year-end report: The Government of Cameroon produced but did not publish this document
- Audit report: This was published by the Government of Cameroon.

According to the International Budget Partnership's Open Budget Survey 2012, Cameroon performed poorly on the indicators of budget transparency. Of the eight key documents, only four were made available to the public.

The 2012 Open Budget Survey revealed that Cameroon's [Open Budget Index] 2012 score is 10 out of 100, well below the average score of 43 for all the 100 countries surveyed. It is also below the score of other countries in the region, including Burkina Faso, the Democratic Republic of the Congo and Mali. Cameroon's score indicates that the Government provides the public with scant information on the national government's budget and financial activities during the course of the budget year. This makes it challenging for citizens to hold the Government accountable for its management of the public's money (International Budget Partnership, 2012c, p. 2).

The International Budget Partnership therefore made the following recommendations to the Government of Cameroon:

- Documents that are restricted to internal use or not produced should be published on government websites. In particular, there is a need for the Government to publish a Citizens' Budget in non-technical and simple language.
- Efforts should be made to ensure the comprehensiveness of published budgetary information.
- Opportunities should be created for the public to participate in budgeting
- Legislative oversight functions relating to budgeting should be strengthened
- The capacity of the supreme audit institutions should be strengthened to provide effective budget oversight (International Budget Partnership, 2012c, pp. 2-4).

### 5.3.3 Copyright laws

Copyright law in Cameroon is governed by the Copyright Act No. 2000/011 of December 2000. This law allows authors to create exclusive or non-exclusive licenses over copyrighted material in favour of third parties. In order to retain its validity, a licence contract must be reduced into writing. A licence may be granted for valuable consideration or free of charge. Thus, open licences can be used to transfer copyright in government documents, but the law also recognizes that certain public works should be made available to the public without restrictions that apply to copyrighted works. Works that do not enjoy copyright protection under the law include:

- Laws
- Court judgments
- Official instruments (and their official translations).

### 5.3.4 Open government data initiatives

The Government of Cameroon generally does not release official data to the public in a systematic format or on any recognized platform. The Ministry of Posts and Telecommunications and the Telecommunications Regulatory Board exercise regulatory roles over the country's

Information and Communication Technology sector. Although the government does not have a data portal, it maintains a website (<http://www.spm.gov.cm/>) that aims at providing information about departments and agencies of the Government of Cameroon. The site was created in 2001 in order to implement the National Information Communication Technology agenda. It provides information on sectors of Public Administration in Cameroon such as:

- Agriculture, fishing and animal husbandry
- Justice
- Energy, transport and telecommunications
- National security and defence
- Diplomacy
- Forest, fauna and environment
- Education, training and employment
- Youth and sports
- Research and technological development
- Mines and industries
- Tourism, culture and communications
- Public works, housing and town housing
- State and regional development
- Public health and society
- Handicrafts
- Women and family.

Although the site generally provides information on these sectors, among other things, it does not contain datasets that can be downloaded or reused by the public.

The open data portal of the African Development Bank ([www.opendataforafrica.org](http://www.opendataforafrica.org)) contains data on Cameroon such as:

- Mortality rates
- Information on people living with HIV
- Birth rates
- Employment-to-population ratio
- Export volume of goods
- Malaria mortality rates
- General government expenditure

- GDP
- Illiteracy rates
- Inflation, consumer prices index
- Manufacturing
- Health
- Information and communication
- Statistics on drug-related crimes
- Severity of poverty.

See: <http://cameroon.opendataforafrica.org/>.

The Open Data Barometer offers an analysis of open data initiatives in the African Region. Its analysis provides a rating based on four factors. In the analysis Cameroon scored as follows (on a scale of 100 on each column):

**Table 5: Open data Barometer of Cameroon**

Readiness	7.11
Implementation	6.67
Impact	5.56
Overall Score	5.65

*Source: Open Data Barometer, 2013, p. 31.*

Open data initiatives in Cameroon will have to confront the challenges posed by the following statistics:

- Available data (for 2005) show that fewer than 15 out of 100 people owned personal computers (Open Data for Africa).
- Internet usage was 5 per cent in 2011 (Freedom House, 2012).
- There is still a culture of secrecy concerning the release of official information (Forest Transparency, 2012).
- The 2010 Cybersecurity and Cybercriminality Act confers broad powers on criminal investigators to access user data. This has potential adverse effects on the right to privacy of data.

The Cameroon Government has recognized the need to strengthen ICT-capacity in order to build a “development-oriented information society”, and to this end it has adopted a national policy for the development of information, which may



have some influence on the country's pursuit of OGD Initiatives. The policy objectives include the following:

- To foster the development of Cameroon by creating a people-centred, inclusive, and informed society
- To facilitate the creation, exchange, and use of information among citizens as a means towards achieving sustainable socio-economic growth.
- To exploit ICTs in order to alleviate poverty and improve the quality of life of citizens.

(National Policy for the Development of Information, 2007, p. 7).

## 5.4 Ghana

Ghana became a member of the Open Government Partnership in 2011, and its main policy framework for the implementation of open government is its OGP National Action Plan, which was first adopted in 2013. The National Action Plan 2013-2014 was adopted by the Government of Ghana upon the country's endorsement of the Open Government Declaration of the Open Government Partnership. In an effort to achieve the transparency, accountability and participation objectives, the Government also adopts OGD principles and frameworks within its action plan that promote the use of open data to achieve transparency, accountability and participation. In addition to the Plan, which is a direct effort to ensure and enhance open government implementation in Ghana, the Ghanaian government also has a number of national policies aimed at achieving transparency, accountability and participation objectives in the country. These include policy documents such as the National Governance Programme, the National Anti-Corruption Plan (2012-2021), and the Ghana ICT for Accelerated Development Policy, 2003.

The Constitution of Ghana and specific legislations also contain principles aimed at achieving transparency, accountability and participation. For example, the Commission on Human Rights and Administrative Justice is established under the Constitution to, among other things, investigate and take appropriate

steps in response to corruption and the misappropriation of public funds and investigate corruption and the activities of administrative bodies.

The Ghana ICT for Accelerated Development Policy outlines the direction of Ghana's policy on ICT. It emphasizes the need to develop Ghana's information society and economy. The document identifies, among other matters, the policy challenge of the undeveloped state of ICT-supporting infrastructure in Ghana. Highlights include:

- The policy espouses the idea that developing ICT-capacity within the economy and wider society can quicken the pace of social and economic development in Ghana.
- The overall policy objective is to "transform Ghana into a middle income, information- rich, knowledge based and technology driven economy and society".

Specific policy objectives include:

- To enhance the Ghanaian educational system through the use of ICT at all levels
- To foster the development and modernization of Ghana's national information and communications infrastructure.

(Ghana ICT Policy, 2003, p. 9).

### 5.4.1 Open government initiatives

Ghana joined the Open Government Partnership in 2011 and also launched its Open Government Data Portal in the same year. The portal has several hundred data sets and is seen as being an example in Africa. Other measures that have been taken by the Government include the accession to the Extractive Industries Transparency Initiative in 2003 and the creation of a Policy Evaluation and Oversight Unit in 2009, which is described as the "gateway to information on good governance in Ghana". The Unit coordinates and manages government policy for better coherence and coordination. It may also be noted that Ghana joined the African Peer Review Mechanism in 2005.

### 5.4.2 Access to information

Article 21 (1) of the Constitution of Ghana provides that all persons have the right to information, which includes access to official documents. This right is expressly made subject to “such qualifications or laws as are necessary in a democratic society”. While there is as yet no specific legislation elaborating on this right, a proposed law, the Freedom of Information Bill, has been laid before the legislature. Contrary to official projections stating that the Bill would have been enacted “by the end of 2013”, it appears that this date proved to be infeasible (OGP Ghana, 2013, p. 17).

It is gratifying to note that civil society groups in Ghana have played a vibrant and important role in influencing the contents of the proposed law, especially through ensuring that the right to information is not unduly watered down by unjustifiable exceptions (World Wide Web, 2011, 14). As a useful measure, efforts have also been made to foster public enlightenment about the proposed statutory reforms on the freedom of information (OGP Ghana, 2013, p. 17).

### 5.4.3 Citizen engagement

The Constitution of Ghana contains an elaborate framework on local government and decentralization. By bringing government to the grassroots, the constitutional framework on decentralization seeks to foster the development of participatory democratic structures in Ghana. This constitutional arrangement provides a detailed legal basis for citizen engagement. Furthermore, article 240 (e) of the Constitution explicitly recognizes the need to provide facilities for people to participate effectively in governance.

Through its policy on open government, the Government of Ghana also seeks to encourage the input of citizens in policy formulation activities. For instance, Sector Working Groups in Government Ministries, Departments and Agencies serve to facilitate the interface between citizens and government officials, and enable citizens to make contributions to the formulation of public policy (See: OGP Ghana, 2013, p. 8).

The Country also has Metropolitan Municipal District Assembly levels referred to as MMDAs. The MMDAs work in partnership with civil society organizations to foster citizen engagement and achieve a more participatory democracy (see: OGP Ghana, p. 22).

At the level of the presidency, the President engages with the press, periodically, on various issues. Some past Ghanaian Presidents have utilized a “People’s Assembly” system, a presidential forum with the people that enables the President to interact annually with the people in a different regional capital (See OGP Ghana, 2013, p. 8).

There are also several active civil society groups that work hard towards moving the country, its Government and people, forward in the direction of transparency, accountability and participation.

### 5.4.4 Accountability and fiscal transparency

There are several laws introduced by the Government of Ghana for the purpose of promoting budget transparency and fiscal accountability. Some of these include:

- Financial Administration Act
- Internal Audit Agency Act
- Public Procurement Act
- Whistleblower Act 2006
- Code of Conduct for Public Officers (article 284 of the Constitution of Ghana), which contains elaborate provisions on assets declaration by public officers
- Petroleum Revenue Management Act 2011 (Act 815), which established a Public Interest and Accountability Committee (PIAC) constituted largely by representatives drawn from civil society organizations. The Public Interest and Accountability Committee performs oversight functions on the collection and use of petroleum revenue. In this way, Committee seeks to foster transparency in the spending of petroleum revenue (see OGP Ghana, 2013, pp. 11, 19).

Many of these laws require traditional accountability methods such as the publication of

statements of account in the Gazette or in reports to be submitted to specified public authorities. Sections 40 and 41 of the Financial Administration Act, for instance, place an obligation on certain public officials to publish the statements of account of their departments or designated funds for reporting purposes. These laws do not necessarily make budget and fiscal information available to the public in any accessible format, so while they promote accountability, they do not make citizens the objects of accountability and they do not necessarily promote citizen engagement in any direct manner. Nevertheless, Ghana was one of five African countries to receive an 80 per cent score for the strength of its Supreme Audit Institution in the International Budget Partnership Open Budget Survey for 2012. In that year, Ghana scored 50 for overall accountability and transparency in its budgetary process.

With regard to budget “openness”, Ghana’s performance in the individual sections of the Open Budget Index were as follows:

- Pre-budget statement: This was not produced by the Government of Ghana
- Executive’s budget proposal: This was published by the Government of Ghana
- Enacted budget: This was published by the Government of Ghana
- Citizen’s budget: This document was not produced by the Government of Ghana
- In-year reports: This was published by the Government of Ghana
- Mid-year review: This document was published by the Government of Ghana
- Year-end report: This was not produced by the Government of Ghana
- Audit report: This was published by the Government of Ghana.

#### 5.4.5 Open government data initiatives

In its assessment of the feasibility of OGD initiatives in Ghana, the World Wide Web Foundation concluded that the country presented a “compelling case in terms of [Open Government Data] readiness” (World Wide

Web, 2011, p. 3). This view was informed by the presence of several factors. For instance, there is the political will to foster a culture of transparency in governance as evidenced by the favourable disposition of highly placed officials towards OGD initiatives. Other factors include the meaningful commitments that have been made towards creating formidable legal and institutional frameworks to sustain OGD, and the vibrant roles that civil society groups in Ghana play towards pushing the OGD agenda. (World Wide Web, 2011, pp. 3-4).

There is a collaborative institutional framework for the regulation and promotion of OGD implementation in Ghana. The National Information Technology Agency (NITA), a department of the Ministry of Information, is the body charged with the implementation of Ghana’s information and communications technology policy. In the discharge of its functions, NITA entered into strategic partnerships with the World Web Foundation in order to establish the Ghana Open Data Initiative. It is important to note that NITA is also the agency officially charged with implementing Ghana’s Open Data Initiative (GODI) (Alonzo, 2012).

Other government institutions within the open government institutional framework include the Ministry of Information and the National Media Commission. Civil society groups also play a vital role in advancing the case for open government implementation in Ghana. Some of these groups include: Coalition on the Right to Information Bill; Media Foundation for West Africa; Ghana Journalists Association (OGP Ghana, 2013, p. 17). It is important that these groups, which usually focus on transparency and accountability move towards pursuing an OGD perspective for open government implementation strategies.

The idea of an open data initiative in Ghana was regarded as significant for the following reasons:

- Ghana is one of the leading democracies on the African continent. An open data initiative was regarded as necessary in order to foster a culture of transparent governance.
- The open data initiative was a means to increasing the levels of citizen engagement

in Ghanaian society, by empowering individuals with the knowledge needed to demand accountability from their political leaders.

- Open data were also regarded as necessary for an emerging economy such as Ghana in order to encourage investors and reduce transactional risks and costs.
- The fourth thematic agenda of the Open Government Partnership places emphasis on technology and innovation. Thus, Ghana sought to increase its capacity for technological innovation.

#### 5.4.6 Open data portal

The Ghanaian Government currently runs an open data portal where government data are freely and openly accessed. The portal [www.data.gov.gh/](http://www.data.gov.gh/), contains over 523 data sets that provide information ranging from revenue distribution formula, to information on the agricultural sector of the economy, energy indicators and electricity generation. Fifteen departments currently participate in the publication of data sets, documents, applications and services for public consumption on the portal.

The policy objectives that informed the establishment of the portal include “[fostering] transparency in Government transactions and creating business opportunity for reuse of open government data” ([www.data.gov.gh](http://www.data.gov.gh)). It is also remarkable that the portal allows for feedback by users of the data provided. Notwithstanding, it has been suggested that there is a need to develop information and communications technology capacity in Ghana; the point is crucial of course, as this will empower citizens, who are the mass users of government data to access information on online portals (World Wide Web, 2011, p. 5).

Some of the participating ministries and agencies that contribute to the data portal include:

- Ministry of Food and Agriculture
- Ministry of Local Government
- Ministry of Health
- Electoral Commission

- Ministry of Transport
- Ministry of Energy
- Ministry of Communications
- Ministry of Environment and Technology
- Ministry of Education
- Ministry of Interior.

The most popular datasets on the portal include the following:

- Information about motor vehicle registration in Ghana
- Information on the population by nationality, sex and religion
- Electricity and petroleum consumption
- Government expenditure on education
- Information about road descriptions prevailing in accidents
- National fire outbreaks
- Ambulance emergency response
- Records of criminal activity
- Information on health facilities
- Information on the presidential run-off in the 2008 elections.

#### 5.4.7 Copyright laws

The Copyright Act (No. 690) of 2005 is the law governing copyright in Ghana, and it was amended by the Copyright (Amendment) Act, 2009. The Act allows public sharing of copyrighted work with the author’s permission. A copyright holder may also transfer her economic rights in the work, and a license to deal with copyrighted work may be oral, written, or inferred from conduct. This is a very liberal provision on copyright, as most legal regimes require written agreements for proof of licensing of copyrighted works.

### 5.5 Kenya

#### 5.5.1 Freedom of information

The Constitution of Kenya of 2010 provides a right of access to information in Article 35, giving citizens the right to access information that is held by the State or by another person

and required for the protection of any right or fundamental freedom. Article 35 (3) imposes an obligation on the Kenyan State to “publish and publicize any important information affecting the nation”. This goes beyond the right of citizens to access information and places an obligation on governments to make that information available by publishing it. This is a feature of OGD that is not necessarily present in most freedom of information legal regimes. The position accords with the notions that connect open data initiatives with transparent and accountable governance. Thus, the State owes its citizens the right to publish important data, which will in turn empower them to hold the government accountable.

There is no legal framework for the protection of these rights, but freedom of information and data protection bills have been laid before the legislature in Kenya, and the passing of these laws will help strengthen the legal framework for open government implementation in the country. These two proposed legislations would have significant implications for Kenya’s open government implementation plans if enacted into law.

The Official Secrets Act protects classified government information and precludes it from publication.

### 5.5.2 Copyright laws

The relevant law governing copyright in Kenya is the Copyright Act 2001. Under the Act, copyright in a work is transmissible by assignment, license, testamentary disposition, or by operation of law as moveable property. An assignment or exclusive licence to deal with copyrighted material must be in writing and must be signed by or on behalf of the licensor. A non-exclusive licence may be written, oral, or inferred from conduct.

The Government of Kenya uses Creative Commons licences on some of its sites, such as the law reporting website, discussed below. Some government documents, such as judicial decisions, are in the public domain and not subject to copyright.

### 5.5.3 Budget transparency

Kenya is committed to ensuring budget transparency and promoting a participatory process in budget preparation. Some of the country’s commitments under the Open Government Partnership are as follows:

- Promoting transparency and accountability on budget information
- Permitting the public to access the Integrated Financial Management Information System (IFMIS) (OGP Kenya, 2012, p. 6)
- Involving the public in budget preparation using technology channels
- Publishing data on proposed and approved budgets
- Publishing data on citizens’ budgets in machine-readable format.

The reality of its commitment to meeting these targets can be determined from its score of 49. With regard to openness of its budget process, the performance of the Kenyan Government was as follows:

- Pre-budget statement: This was published by the Government of Kenya
- Executive’s budget proposal: This was published by the Government of Kenya
- Enacted budget: This was published by the Government of Kenya
- Citizen’s budget: This was published by the Government of Kenya
- In-year reports: This was published by the Government of Kenya
- Mid-year review: This was produced but not published by the Government of Kenya
- Year-end report: This was produced but not published by the Government of Kenya
- Audit report: This was published by the Government of Kenya (See International Budget Partnership, 2012k).

#### 5.5.4 Open government initiatives

Open government reforms in Kenya were guided by the underlying idea that government data are an asset, which must be exploited in order to deliver transparent and accountable government to the Kenyan people, and the country also seeks to improve the quality of national information and communications technology infrastructure. The country hosted the inaugural African Regional Meeting on the Open Government Partnership from 29 to 30 May, 2013. The meeting aimed at setting a roadmap for the open government agenda in Africa, and encouraging other African countries to join the Open Government Partnership (Sendugwa, 2013).

#### 5.5.5 Open government data initiatives

As a member of the Open Government Partnership, one of Kenya's key commitments is to foster transparency and accountability in governance. In specific terms, Kenya has gone about this by creating an open government data portal to publish data sets online. Kenya was the first sub-Saharan African country to establish such a portal. The avowed policy of the Kenyan Government is to publish and disseminate government data on portals which are accessible to members of the public. By providing data in simplified formats, the objective is to ensure that mass users of government data can readily appreciate and understand the information published. At the time it was launched in July 2011, the portal contained seven years of detailed government expenditure data (World Bank Institute, 2011). There were about 200 datasets when the portal was first established, and the Government has progressively increased the number of data sets. The portal currently contains about 547 data sets, which are subdivided into the following categories:

- Environmental and natural resources
- National accounts and inflation
- Agriculture
- Counties
- Education
- Employment
- Energy

- Financial sector
- Health sector
- Justice
- Land and climate
- Manufacturing and industry
- Migration
- Population
- Poverty
- Public finance
- Tourism
- Transport and communication
- Water and sanitation.

See: <https://opendata.go.ke/browse>.

Reports also reveal that the portal has attracted 176,000 page views and much of the data has been downloaded and shared on various external websites (Government of Kenya, 2012).

Although the open government and open data agenda of the Government of Kenya is regulated by the Ministry of Information and Communication, the Kenyan open data portal is fed by information from various ministries, departments, and agencies, including:

- Ministry of Finance
- Ministry of Planning
- Ministry of Health
- Ministry of Education
- Kenya National Bureau of Statistics
- The objectives of the open data initiatives are to:
  - Facilitate accessibility to government data
  - Enhance innovation through the aid of an ecosystem built around government data
  - Foster transparency in governance
  - Release latent social and economic value by promoting access to government data.

One remarkable example is the use of information and communications technology in justice delivery reforms. ICT software is used to monitor the prompt delivery of judicial decisions, as well

as to assign cases to judges, thereby eliminating the incentive for corruption that discretion may offer in this regard. Citizens may also obtain access to information about cases through the aid of SMS services (OGP Kenya, 2012, p. 4).

The National Council for Law Reporting in Kenya, the body statutorily entrusted with law reporting and law revision, publishes legal information on [www.kenyalaw.org](http://www.kenyalaw.org). The information on the [www.kenyalaw.org](http://www.kenyalaw.org) website is in the public domain and is generally not subject to copyright restrictions. The website contains information such as:

- Annual report on the state of the judiciary and the administration of justice
- Database of municipal laws and international instruments
- Cause lists of different hierarchies of courts, i.e. from the Supreme Court, Court of Appeal, High Court of Kenya, Industrial Court of Kenya, Chief Magistrates Court
- List of licensed process servers
- Information on election petitions
- Kenya Law Journal
- Archives of gazettes and notices
- Hansard Archive
- Kenya Law Forum (where users can post comments)
- Kenya law blog.

Although open data portals have been created, public officials are still reluctant to provide useful information, with the result that data consumers lack access to up-to-date and useful information. A possible explanation for this attitude among public officials is the poor information culture within government circles, where public officials treat public goods, including information, as their private property and entitlement, and the cynical assessment by corrupt public officials that more transparency could lead to adverse consequences for them.

#### **5.5.6 Analysis of the use of open government data in Kenya**

The establishment of the Open Government Data Portal in 2011 encapsulates the remarkable

strides recorded in fostering the open data movement in Kenya. However, the following information must be considered:

- Only 14 per cent of Kenyans use the Open Government Data Portal
- Many Kenyans are unaware of the existence of the portal
- Inability to use the portal is another reason for the poor use of the portal so far
- Usefulness of information provided on the site is another concern that could affect the popularity and utility of the site.

Researchers are currently looking into the possible challenges that the digital divide may pose to the use of open data in developing countries. The digital divide refers to the different situations of those who have access to data and information and communications technology (ICT), supporting facilities on the one hand, and those who do not have this access. However, the government is committed to creating 'digital villages' in order to enable citizens who live outside urban areas to have access to information (see Open Data Research Network, 2013; OGP Kenya, p. 3).

## **5.6 South Africa**

### **5.6.1 Access to information**

Section 32 of the South African Constitution of 1996 grants citizens the right of access to information, which includes "any information held by the State". The section also compels the Government to enact national legislation for the practical implementation of the protection of the right. One such piece of legislation is the Promotion of Access to Information Act.

The Promotion of Access to Information Act, enacted in 2000, provides for the right of access to publicly and privately held information in order to protect the rights of citizens. Accordingly, citizens are entitled to government-held information as well as privately held information that affect the enjoyment of their constitutionally guaranteed rights. This is in line with the relevant provisions of the South Africa Constitution and enforced by the South African Human Rights Commission. The Act seeks to allow access to

both public and private information, required for the exercise and protection of any rights.

As a constitutionally established instrument, the focus of South Africa's access to information legislation is human rights-based and focuses on the protection of human rights, including the right of access to information. It also has a governance-related objective, as it seeks to promote transparency and accountability in public and private institutions (see Government of South Africa, 2000).

In addition to facilitating the provision of government-held information to the public, the Act also encourages citizen participation in policy formulation and budgetary matters. It also makes information accessible by establishing the administrative process for accessing information. Publicly-held information, according to the Act is made available to the public for free, unless the information is to be reproduced, in which case, there will be a fee to cover such costs. This is an important way to address the questions raised in relation to the cost of providing information to citizens free of charge, which is a requirement for open government data. The Act urges public and private bodies to publish a manual (freedom of information guide), which should be published in the Government Gazette and contain the following:

- Postal and street address, phone and fax number and, if available, electronic mail address of the head of the body
- Description of the guide if available, and how to obtain access to it
- Latest notice regarding the categories of record of the body which are available without a person having to request access in terms of the Act
- Description of the records of the body which are available in accordance with any other legislation
- Sufficient details to facilitate a request for access to a record of the body, a description of the subjects on which the body holds records and the categories of records held on each subject.

Although the Act is crucial in promoting transparency and citizens' participation in

governance, compliance with the law has been weak. According to the 2013 "shadow report", as it is termed, issued by the Promotion of Access to Information Act CSN, the civil society network that monitors the Promotion of Access to Information Act, "only 16 per cent of information requested was released in full in the past year, down from 35 per cent in 2009". Furthermore, "timeframes for responses under PAIA continue to be flouted – only 22 per cent of responses met the statutory timeframes at the initial request stage." The report adds that an alarming 65 per cent of all requests for information made to those public bodies that actually responded to the requests were refused. In all, 54 per cent of requests simply went unanswered, demonstrating a notable increase in the outright failure to respond since 2011 (Freedominfo, 2013).

In addition to the Promotion of Access to Information Act, the Promotion of Administrative Justice Act was enacted in 2000 to promote transparency and accountability of public institutions in South Africa. The main objective of the Act is to promote administrative efficiency in public institutions (see Government of South Africa (b), 2000). The National Archives and Records Service of South Africa Act also grants citizens free access to national archives that are more than 20 years old.

The Protection of Personal Information Act was enacted by the South African Parliament in November 2013, although President Jacob Zuma has not yet declared the Act's commencement date. The Protection of Personal Information Act applies to the processing of personal information entered in a record by or for a responsible party. It applies to both public and private bodies. The act is intended to achieve the following:

- Promote the protection of personal information processed by public and private bodies
- Introduce certain conditions so as to establish minimum requirements for the processing of personal information
- Provide for the establishment of an information regulator to exercise certain powers and to perform certain duties and functions in terms of the act and the



Promotion of Access to Information Act 2000

- Provide for the issuing of codes of conduct; to provide for the rights of persons regarding unsolicited electronic communications and automated decision making;
- Regulate the flow of personal information across the borders of the country
- Provide for matters connected therewith.

**(Government of South Africa, 2013).**

The Government of South Africa introduced a Protection of State Information Bill, which was passed by Parliament in 2013 to replace the Country's 1982 Protection of Information Act. The objective of this law is to protect classified information that is held by the Government from disclosure to and by public and private persons. President Zuma did not give his assent to the bill, and therefore it was returned to Parliament. The bill is said to contain provisions that would violate the rights and independence of journalists and punish whistleblowers who disclose information in order to promote public interests (see Smith, 2012).

Whistleblowers are afforded protection under the Protected Disclosures Act 2000, which protects whistleblowers in both the private and public sector. The Protected Disclosures Act reinforces the right to make disclosures about wrongdoings to specified regulatory bodies such as the Office of the Public Protector and the Auditor General. Accordingly, there is an attempt by the Government of South Africa to provide a comprehensive arrangement of the legal framework in order to ensure that the rights guaranteed under the Constitution are protected and that any restrictions are within the legally permitted boundaries. Thus, while Chapter 2 of the South African Constitution grants the press and other media the right to access and impart information, the Bill of Rights does not extend to "propaganda for war; incitement of imminent violence; or advocacy of hatred that is based on race, ethnicity, gender or religion, and that constitutes incitement to cause harm." In an opinion poll conducted by Ipsos, a research firm, the result showed that 44 per cent of

South Africans believe that the Protection of State Information Bill, if passed, will limit media freedom, and thus contradict the provisions of the Bill of Rights (Smith, 2012).

### 5.6.2 *Budget transparency*

In the Open Budget Index, South Africa ranked first in 2010 among the 94 countries surveyed, and second after New Zealand in the latest rankings, for 2012. This makes South Africa one of the top performing countries in terms of providing extensive information to the public regarding its budget documents and financial activities during the year.

According to the 2012 Open Budget Index report, South Africa published all eight budget documents to the public and increased the amount of information it made available in the eight budget reports, earning a score of 90 in the 2012 Open Budget Index. This gives credence to the country's commitment to foster transparency of public finances and promote citizens' participation in decision-making. To facilitate public participation in the decision-making process, the Government of South Africa has, over the years, formulated a number of policies to support the attainment of this objective. Some of these policies include the White Paper on Local Government of 1998, the Batho Pele Principles of 1998, and community-based planning principles.

### 5.6.3 *White Paper on Local Government of 1988*

This document spells out the framework for citizens' participation in local decision-making process. It establishes the basis for a system of local government, which is centrally concerned with how local citizens and communities find sustainable ways to address their needs and improve the quality of their lives.

The policy framework provides three approaches, which can assist municipalities to improve their services. These approaches include integrated development planning and budgeting; performance management; and working together with local citizens and partners. The framework emphasizes the

potential of integrated development planning as a mechanism to enable prioritization and integration in municipal planning processes, and to strengthen links between the development and institutional planning processes. It proposes a process for the development of a performance management system for local government; and suggests ways in which municipalities can engage citizens and community groups in the affairs of the municipality in their capacities as voters, beneficiaries of public policy, consumers and end-users of municipal services, and partners in resource mobilization for the development of the municipal area.

The White Paper also suggests that municipalities should develop mechanisms to ensure citizen participation in policy formulation, monitoring and evaluation and policy implementation. According to the white paper, the following approaches can assist to achieve this:

- Forums to allow organized formations to initiate policies and/or influence policy formulation, as well as participate in monitoring and evaluation.
- Structured stakeholder involvement in certain council committees, in particular, if these are issue-oriented committees with a limited lifespan rather than permanent structures.
- Participatory budgeting initiatives aimed at linking community priorities to capital investment programmes.
- Focus group participatory action research conducted in partnership with non-governmental organizations can generate detailed information about a wide range of specific needs and values.

#### 5.6.4 *Regulatory bodies for open government implementation*

Chapter 9 of the Constitution of South Africa provides for the establishment of institutions to safeguard and enforce the constitutional principles of openness, transparency, accountability, responsiveness, and ethical governance. Some of these institutions directly touch on issues relating to the promotion of open government and the achievement of the transparency, accountability and participation objectives are as follows:

- **Public Protector:** The Office of the Public Protector is an independent agency that investigates alleged improper conduct in state affairs and takes remedial actions accordingly. The agency also receives complaints from the public against corrupt government agencies or officials.
- **South African Human Rights Commission (SAHRC):** The institution was set up to support constitutional democracy and promote respect for human rights. The commission receives information or reports from other government agencies detailing how they complied with the Bill of Rights. The Commission is responsible for the protection of the right to freedom of information.
- **The Commission for Gender Equality (CGE):** The commission was set up to promote and strengthen democracy and the culture of human rights in the country. It receives gender-related complaints and conducts investigations on related matters.
- **The Auditor-General:** Similar to the Office of Public Protector, the Auditor General acts as a watchdog over government activities. It was set up to ensure efficient and proper use of public funds. The Office of the Auditor General reports on public finances and has the authority to audit institutions that are financed by public funds. According to the World Bank, since 2005/06, the Auditor General has provided management and audit reports on shortcomings in policies, systems, and procedures of government departments and agencies (World Bank, 2010).
- **Independent Communications Authority of South Africa (ICASA):** This agency regulates South Africa's telecommunications and broadcasting services in the interest of the people. It regulates and promotes open data by developing broadcasting codes of conduct and other relevant regulations.

In addition to these institutions, South Africa intends to establish the office of an Information Regulator, which will oversee the enforcement of the access to information law and the new data protection law as well as implementation of related policies, fulfilling a

long-run goal of access to information activists. The Regulator is expected to provide greater oversight in the promotion of access to information.

### 5.6.5 Open government initiatives

South Africa is among the eight founding countries of the Open Government Partnership. As part of the conditions for Open Government Partnership member countries, South Africa developed an action plan from June to September 2011, which discloses measures on how the country would achieve its Open Government Partnership objectives. Under this action plan, the Government of South Africa subscribed to achieving eight commitments, centred on the objectives of improving citizens' access to information, accountability, civic participation and the use of technology and innovation to promote openness.

The process of developing the action plan included a consultation with the public, including civil society organizations, Government officials and citizens. The action plan contains some legal and policy requirements, which include the following:

- Approve guidelines on sanctions for corruption-related cases
- Develop a citizen participation guideline
- Develop an accountability management framework for public servants
- Enhance the involvement of civil society at every stage of the budgetary process.

In an assessment report released by the Open Government Partnership Independent Report Mechanism, South Africa, as at 2013 had achieved only one of its eight commitments and efforts are under way to ensure the other commitments are implemented (South Africa, 2013).

### 5.6.6 Batho Pele Principles

Batho Pele means "people first" in the Sotho language and was developed as a mechanism for promoting citizen and customer-centred service delivery to enhance effectiveness in the public sector. The principles were adopted in 1997 as a framework to improve public service delivery in a transparent manner that is in line with citizens' demands. It is a framework designed to promote accountability of government officials and ensure efficient delivery of services to citizens who should

be treated as customers, and as such, those citizens should be able to hold public officials individually accountable for the failure to deliver quality public services. The principles include the following:

- **Consultation:** public bodies are expected to consult users of public services to ensure inclusiveness in decision-making. Consultations may be effected through surveys, meetings, interviews, etc.
- **Setting service standards:** Benchmarks are necessary to measure performance and also the level of citizens' satisfaction on specific public service.
- **Increasing access:** access is important as it promotes a sense of ownership and closes the inequality gap in service delivery.
- **Ensuring courtesy:** Public servants are expected to treat citizens with respect and honesty.
- **Providing information:** Information about public services and contact details for the relevant officials should be made available to citizens at the point of service delivery and in communications.
- **Openness and transparency:** Citizens should be encouraged to probe government actions and their queries should be responded to, honestly and frankly.
- **Redress:** This should be applied when government services are falling below expected standards. Governments should have a remedy to improve the quality of service.
- **Value for money:** Public services should be executed efficiently and effectively to increase the level of citizen's satisfaction.

These eight principles constitute the baseline for providing services and determining how to improve service delivery in public institutions. They are not exhaustive, however, and public agencies and institutions may provide additional principles and guidelines that serve the purpose of improving service delivery to their citizens. For example, the Department of Community Safety and Liaison for the Province of Kwazulu Natal has added the following three principles to its implementation of Batho Pele:

- Encouraging innovation and rewarding excellence
- Customer impact
- Leadership and strategic direction.

In assessing the performance of government institutions in implementing the principle of openness and transparency, the Public Service Commission in 2008 found in a study that “although most departments do not comply with the requirement of the White Paper on the transformation of public service delivery in providing an annual report to citizens, they still practice the values of openness and transparency. They make information required by the Batho Pele White Paper available to citizens through the publishing of various documents such as annual reports and brochures” (Public Service Commission, 2008).

As illustrated, there have been efforts to make information available to the public about their rights and mechanisms put in place to ensure that these rights are protected. It is interesting to note that the Government of South Africa practices a rights-based approach to matters relating to governance and citizen engagement and this requires ensuring that there are mechanisms for seeking redress in the event that rights (which are constitutionally guaranteed) are protected. This is a very important point to note because it places a strong obligation on the Government to deliver information as a public good that citizens are entitled to, while also ensuring that citizens can seek the fulfilment of such obligations by having recourse to official mechanisms such as courts and judicial panels, commissions and tribunals.

### 5.6.7 Copyright laws

South Africa is a member of the World Intellectual Property Organization (WIPO). The country has a copyright law, which was enacted in 1978 and amended in 2002. Although literary and musical works are eligible for copyright protection under South African law, section 12(8) (a) of the Copyright Act provides that legislative, administrative and legal texts are not eligible for copyright protection, which places such government-produced material in the public domain for anybody to use or reuse as they see fit, subject to data privacy and security laws (South African Copyright Act). South Africa

is one of two African countries for which Creative Commons licences have been ported. This means that Creative Commons licences have been transformed by domestic lawyers, with the South African copyright framework in mind, so that the licenses apply specifically to the South African legal system. Thus, creators of copyright-eligible work can license such works openly, using specially prepared licences that have been created with the South African legal system in mind. The other African country for which Creative Commons licences have been ported is Egypt. The absence of copyright protection or the adoption of open licences does not necessarily ensure that the public has access to such material. Accordingly, there must be additional efforts to provide access in order for the information to be useful to the public.

### 5.6.8 Open government data portal

South Africa has yet to develop a national open data platform. However, there are plans to establish the Open Environmental Data Portal, which is among the eight commitments agreed to by the country under the Open Government Partnership.

## Section 6

### 6.1 Inquiry into citizen engagement with open government data in selected countries

As part of the inquiry into OGD implementation in Africa, the present study incorporates a survey of citizens of African countries who live in and outside the continent. The objective of the survey was to analyse the extent to which African citizens engage with government data, especially when such data are provided in open formats that permit reuse and adaptation.

The details of the survey are provided below in annex I to the present report. This section provides a qualitative discussion of the results of the survey.

### 6.2 Who uses open government data?

The survey was an online project open to Africans with Internet access and email accounts since they received the survey by email. Accordingly, it was open only to Africans with experience using the Internet and with the relevant devices to communicate and do educational or professional work. The survey was distributed among a diverse and random group of over 4,000 unique participants. The survey targeted residents of specific African countries as well as certain African groups based in the diaspora.

More than 50 per cent of those who participated in the survey had masters degrees or equivalent qualifications, and more than 50 per cent of survey participants used OGD in presentations, articles and reports. This shows that OGD can be expected to be used by a certain class of society, but even within that class, there is limited reliance on OGD, either because it is not available or because it is not accessible, which includes participants having limited or no knowledge of OGD.

In Africa, OGD will be available to a certain class of society that has access to the Internet, is educated, and can rely on OGD as providing timely and complete data about the government

and its activities. These do not constitute the majority of African populations. Many of these people are those who are comfortable with using new technologies in their personal and professional lives, which would explain why the majority of the participants in the survey were between the ages of 26 and 40. This is the age bracket for young professionals whose careers took off, or are taking off, in the midst of immense technological growth and access to information and who use these technologies for personal and professional activities.

Although the United Nations has adopted 15-24 as the age for defining youth, the African Union has adopted 15-35 as the regional standard (UNECA, 2009, p. 14). Judging by this and the results of the survey, it can be assumed that young African professionals within the age range of 26-40 may interact more with OGD than other groups in society because they have access to new technologies which they use beyond their personal space. These people use these technologies for their work, businesses, and studies, and as such would have greater need for the kind of data supplied by governments than most other age groups in African countries.

At the start of the century, the need for information and communications technology skills in the job market became obvious as the field became increasingly important for a variety of industries, so the private sector sought to hire people with significant ICT skills and Africa was not left out of the new reality (UNECA, 2009, p. 27). It is also recognized that young people engage more with new technologies, and therefore government and private initiatives aimed at improving Internet access usually target young populations (McKinsey, 2012). Even as the response to the survey has shown, those who respond to these Internet-based activities are usually within the “youth” bracket.

Consequently, young professionals and students would be more likely to respond to and use OGD than any other group because of their relationship with new technologies both personally and professionally. Although these groups, especially where they consist of a growing middle class in many developing economies, may not be actively involved in political movements, the provision

of OGD would provide information that might make them politically aware and, therefore, politically active, so that they provide responses to government activities and communications.

The survey thus highlights that a move towards open government must not exacerbate the digital divide, which an over reliance on OGD as the means to achieving open government may produce. open government measures must be inclusive and must cater to the mass of the population who may be conversant with mobile technology but are still new to Internet technologies. In the long term, an increase of literacy levels and progress in increasing the general skills level of the population will support both open government and OGD measures.

### 6.3 Why use open government data?

This report has been about open government implementation, but there has been a focus on OGD as an effective means of implementing open government. As noted above, many of the young people in developing economies are likely to engage with OGD because of their personal and professional relationship with new technologies and the Internet. Accordingly, the provision of open government would be one of the ways in which governments can ensure that these groups are part of the governance process. Most of the participants in the survey had explored OGD from different government sources (local, state, national and international governments). As a result, among the groups of mostly young educated professionals who participated in the survey, most of them had used OGD.

Different people use OGD for different reasons, and as noted above, the objectives of OGD are broader than the objectives of open government. Consequently, not all people who use OGD will use it to pursue the transparency, accountability and participation objectives. In this survey, most of the participants who engaged with OGD did so to enhance their education and skills, which would fall under the Knowledge or Innovation objective of OGD. Other significant uses included population information and government budget, the latter being a core part of open government indicators. A significant number of participants

were also interested in accessing OGD for business and macroeconomic data. Data on weather, housing and transportation also fuelled the interest of participants. This shows that issues relating to innovation are more likely to interest those with access to OGD than pure transparency, accountability and participation issues.

This does not mean that governance and political issues do not concern citizens with access to OGD, but rather there are some priorities that carry equal or higher weight than transparency, accountability and participation. This would support the claim that OGD might be the best way to implement open government since it had wider objectives that would draw citizens into the realm of government data, which could then encourage them to participate in governance through their engagement with the data.

Similarly, when asked for their motivation for accessing OGD, participants chose skills building and innovation over motivations such as a desire to make a difference in the community. While many participants were interested in making a difference, there was greater emphasis on innovation and knowledge-related motivations.

Interestingly, the highest number of responses on pressing issues facing national governments indicated corruption as the most pressing national problem, while issues such as poverty and unemployment were not considered as important. It is understood that most of the participants in the survey were educated and employed, and therefore issues relating to poverty and unemployment would not necessarily be considered as pressing issues. However, their response to the query on pressing issues shows that they desire greater transparency and accountability in government, and more than 40 per cent of participants believed that OGD would be an effective means of tackling corruption. This means that OGD is seen as an effective means of achieving the transparency, accountability and participation objectives, and that citizens will engage with open government in order to be part of the fight against corruption and promote transparency, accountability and participation in governance.

## 6.4 Open government data for open government

While the need for open government in Africa cannot be overemphasized, it is important to find means of implementing open government initiatives so that they are inclusive and achieve effective results. There are several ways of doing this, such as using traditional media channels (television, radio, newspapers) and organizing direct engagements between citizens and government officials. More recently, however, the increasing importance of the Internet, new technologies and media devices, and significant volume of digital data have led to new ways of communicating and sharing information.

While OGD is not necessarily available to all sections of society, it is available to those with access to the Internet and who are able to read, whether French, Portuguese, English, Arabic, or a local African language. Accordingly, OGD requires some level of literacy on the part of users. This would exclude significant sections of the African population, since regional literacy levels are among the lowest in the world (UNESCO, 2013). Nevertheless, OGD can serve groups and communities that engage with wide sections of the population and who can use the data and information provided by government to serve citizens on a wide scale. In other words, when concerned citizens, civil society organizations, and entrepreneurs have access to OGD, they can use the data provided to promote the achievement of transparency, accountability and participation objectives, which further promote (formal and civic) education and can create a ripple effect of participation in governance for citizens without direct access to OGD.

This basic inquiry into the use of OGD by Africans reveals that there is a ready market for the use of OGD in Africa, albeit by a fraction of most African populations. But, the section interested in the use of OGD consists of people with access to resources needed to influence government practice through writing and communication, research and participation in business. This should serve as an indicator that the use of OGD for open government implementation will have a ripple effect and serve as a means of building a

strong community of intermediaries who demand OGD and use it to provide services to the wider community. OGD can also provide innovative ways to educate many Africans and thus make them OGD-ready.

Although the use of OGD to implement open government in Africa is not mandatory, it is recommended for African governments that wish to engage with a significant portion of their educated populations, and it encourages innovation, which can in turn lead to social, cultural, economic and political development. Data provided through this channel can feed the kind of development that spirals into other open government processes, such as traditional media, town hall meetings, and the introduction of legislations aimed at achieving the transparency, accountability and participation objectives.

## Section 7

### 7.1 Challenges and prospects for the use of open government data in Africa

#### 7.1.1 African context

Political instability in Africa has led to interventions to strengthen governance structures, and the open government movement is one such intervention. The belief that better government will improve the lifestyle of citizens and provide a better quality of social, cultural and economic life makes the focus on governance pervasive, particularly in Africa. However, ordinary African citizens seem to prioritize governance differently from the manner in which development experts have done for decades. From our survey, it is clear that Africans prioritize economic development above governance issues, and so it is safe to assume that citizens will be more interested in getting involved in development plans that touch on the issues that matter to them the most.

Accordingly, the core open government indicators may not matter to the average African citizen as much as issues relating to income generation, employment and personal development, which are issues that can be dealt with in the implementation of OGD, particularly with regard to innovation and knowledge generation. Consequently, in introducing initiatives such as data portals and data laws, governments must present a narrative that touches on issues such as poverty alleviation, job creation, entrepreneurship, and infrastructure development. Issues such as innovation in health care and education should also be prioritized but more so with regard to service delivery and not necessarily data provision. In other words, there must be urgent steps taken to ensure that the private sector is well equipped to use data that is supplied by the government to provide useful services to members of the public.

Some of the most pressing challenges that are currently being faced by African governments in the implementation of open government in Africa relate to issues such as entrenched cultures in politics and information; poor infrastructure;

and the establishment of proper legal and policy frameworks and their enforcement. These challenges, though not insurmountable, exist on such a scale that they require intense and concerted efforts towards addressing them for effective open government implementation. Since OGD is regarded as a very efficient tool for the implementation of open government, and one that has been recognized as being intrinsic to the existence of open government, there must be efforts towards providing the right legal, policy and technical frameworks for OGD implementation, which will help strengthen open government implementation.

#### 7.1.2 Poor information culture

Following decades of military and authoritarian rule in many African countries, the public space has become hostile to citizens. Demands by citizens do not form part of a rights culture and, consequently, information in the public sector is usually closed. Public officials do not understand their obligation to provide services and public goods, including information. As such, laws and policies to open up the information space in African countries will not be effective unless there is a wider effort to reverse the culture of secrecy in the public sector. Core rules of civil service training should stress the importance of sharing information, and lay down very clearly the bases for determining what information should be open and what should be closed or private and confidential.

There are significant cultural and other intangible efforts that must be undertaken to ensure that open government and OGD are effectively implemented. It has been noted that OGD initiatives must be: demand driven; put data in context; support conversations around data; build capacity, skills and networks; and lead to collaboration on data as a common resource (Davies, 2012). This approach to creating the right enabling environment is worthwhile for African governments to note in sustaining open government and OGD measures.

#### 7.1.3 Data quality and validity

In addition to concerns about the culture of secrecy in Africa, there have been concerns over



the accuracy and validity of data collected in Africa. The validity of data is questionable when it cannot be sufficiently proven where, when and how the data were aggregated. Moreover, the time-usefulness of the data depends on the relevance of the data at a given time. When obsolete data become an integral measure of future data entries, the accuracy of such time series suffers. And in the case of Africa, the worry of many, especially national and international policymakers is that Africa's data might be either invalid, obsolete or both. According to The Guardian newspaper, "in the absence of robust official systems for registering births and deaths, collecting health or demographic data, or the many other things that are known by governments about people in richer countries, the household survey is the foundation on which most development data are built. Numbers from the surveys are used to estimate almost all the things we think we know – from maternal mortality to school attendance to income levels" (Melamed, 2014). However, for household surveys to be representative of the population, information about the population must itself be accurate - and population census figures in many African countries are unreliable or out of date at best.

Morten Jerven gives an example of how data from reputed international organizations can be at best an estimation and at worst, inaccurate. He presented a table which showed the availability of estimates from national statistical offices. The list showed great variation. Only 18 of the 48 countries had prepared estimates for the years 2009 or 2010. Still, the World Bank data provides data in both constant and current prices for all of these countries until and including year 2009. "This means more than half of the rankings of African economies up to 2009 may be pure guesswork," he concludes (Jerven, 2013, p. 23).

In Nigeria for example, much controversy surrounds the validity of the most recent population count. In 2013, the Chair of the National Population Commission, Chief Festus Odimegwu, admitted that the country had not had a credible census since 1816. He blamed the irregularity on distortion and falsification of figures for selfish and political reasons by politicians. Controversy in important data such

as population count implies that other statistical metrics that require population figures such as the GDP per capita and the unemployment rate are likely to be debatable. Jerven argues that national statistics offices across Africa need more support so that they can obtain and report timelier and more accurate data. Donor governments and international organizations such as the World Bank need to do more to help African authorities produce a clearer picture of their demographics and economies.

#### 7.1.4 *Governments and attendant power relations*

In most African countries, the contemporary political systems in place are nascent democracies with a history of deeply hierarchical relations between the government and its citizens. As a result, there are few established structures and institutions that promote accountability and transparency on the part of government. Consequently, citizens are not accustomed to making demands on their government, thus rendering open government initiatives difficult to implement, even when the legal and policy frameworks have been put in place.

It is only recently that the advent of social media has given citizens more of a voice to demand for accountability and better governance. The Arab Spring and the consequent uprisings in the Middle East and North Africa region attest to this, as do similar upheavals in Southern and West Africa.

Where governments remain unaccountable and unresponsive, they do not take into consideration the needs of their citizens; they are unaware of the challenges faced by ordinary citizens; and they do not focus on encouraging participation by their citizens in the governance process. Such governments do not acknowledge any sense of responsibility towards their citizens, and as a result, they see governance as an imposition of their will and their power on the governed. The governed, on the other hand, may respond to this situation in one of two ways. They may protest against the status quo and demand, sometimes violently, that governments address their needs and concerns, particularly when it comes to the provision of public goods. Or, they become

entrenched in the power structure in which they are unable – unwilling, even – to question governments and hold them accountable in any meaningful way.

Open government initiatives are meant to replace these unhealthy and undemocratic power structures with systems that encourage engagement, participation, and mutual respect between governments and the people they govern. African governments must bridge the gap between a powerful elite that controls the governance machinery and poor, deprived and disenfranchised citizens who live on the periphery of society. Issues such as income inequality, rural development and outreach, improved education, free and fair elections, freedom of expression and of the media, should form part of the campaign to open governments in African countries. Related activities that empower citizens help to shape power relations and the relationship between the government and governed.

In essence, in order for open government initiatives to be effective, they must first address the cultural and political issues surrounding governance relations in the particular society. These relations are what underlie the implementation of any open government initiative and what constitute the essence of openness in the first place.

### **7.1.5 Focus on African realities**

The social, cultural, economic and political context in most African countries must be taken into consideration when preparing an open government strategy and when implementing open government activities. Issues such as literacy levels, available infrastructure, popular media facilities, and so on, should drive the priorities and projects adopted by African governments in their open government initiatives.

Like many global movements, the open government movement began outside Africa with predominantly non-African countries. South Africa was the only African country that was among the founding members of the OGP, which has been instrumental in shaping global open government principles and initiatives. OGP initiatives aim to secure government commitment to citizens by promoting transparency, fighting

corruption, empowering citizens and harnessing new technologies to strengthen governance. Substantive contributions have also been provided by OECD to the definition of open government and open government principles globally and, although there are no African members of the OECD, South Africa has a partner status with that organization. Consequently, African input in defining open government principles is minimal at best, which might account for issues such as the focus on OGD as a given, since many of the countries that currently define these standards do not experience the same infrastructural challenges that African countries do.

There must be an African voice in the global dialogue around open government, which will take into account the challenges faced by African governments and people in achieving the transparency, accountability and participation objectives. This can be done within the many regional and subregional frameworks that exist in Africa, starting with the African Union and the African Development Bank. These institutions bring together countries with similar contextual realities, which would create the right environment and attitude for cooperation and agreement. Collaborations between governments, civil society and non-governmental organizations, and corporate organizations operating within the continent must be encouraged in defining legal and policy frameworks as well as in facilitating implementation.

The current situation in which non-African realities determine the framework for delivering change and development, in the open government space, will not result in the kind of engagement that is required for effective open government implementation. As a result, new partnerships and contextual principles must be devised by African organizations, governments, citizens, businesses and civil society actors for defining open government principles and effective implementation of open government initiatives for Africa.

### **7.1.6 Poor infrastructure**

Infrastructural challenges abound in Africa, and these pose a threat to the use of new technologies to provide social, economic,

political and business solutions. Internet access, mobile network coverage, uninterrupted power supply, and data connectivity are just some of the areas where African countries have been unable to make sufficient progress to promote technological growth and development in their territories. These shortcomings affect economic growth, access to education, and also governance and political participation and accountability, because the use of new technologies to drive in all of these areas has contributed to global development trends.

United Nations reports note that, owing largely to infrastructural deficits, Africa trails far behind other regions in the level and growth of e-government, providing services that are at 40 per cent the level of governments in Europe and 30 per cent that of governments in North America, making it the least e-ready region in the world. Established and efficient information and communications technology infrastructure in countries in these regions accounts for the impressive development and improvement in services (UNDESA, 2012, pp. 14, 43).

While the promotion of open government can lead to infrastructure development by making governments more accountable to their citizens regarding the use of public funds and by allowing citizens to communicate their priority needs to their governments, improved infrastructure can also increase citizens' capacity to participate in governance and governments' ability to provide widespread transparency and accountability mechanisms. In some ways, this may be regarded as a chicken-egg dilemma as we try to determine which should come first: open government or OGD. But, since both concepts are significantly intertwined in such a way that their processes and objectives are related and can influence one another, the different groups of stakeholders in the open government and OGD movements must explore ways in which they can achieve similar, if not identical, goals and remain distinct.

This distinctness between open government and OGD has been erased in many developed economies, as governments in countries such as the United States regard open government as process-based as well as object-based. But this would not be applicable in African countries

where several challenges would make it difficult for governments to compulsorily implement OGD as open government and for citizens to engage fully with OGD on a large scale that would directly influence their participation in governance. Accordingly, African governments must retain traditional means of open government implementation such as paper-based record keeping and traditional media engagement, among other things, while also providing OGD for those who can use the data to provide the kinds of development that could see both movements slowly integrate.

### **7.1.7 Comprehensive legal and policy framework**

In order to ensure proper implementation of open government, and OGD, there must be a comprehensive legal and policy framework that defines the roles and responsibilities of all stakeholders and the rules governing the achievement of the transparency, accountability and participation objectives. The laws cover a broad range of issues, including anti-corruption, human rights, copyright law, data protection laws, national security and related laws. Policies drive implementation by spelling out activity statements, objectives and time-lines.

Many African countries, as shown above, have begun to introduce laws to aid their achievement of the transparency, accountability and participation objectives, but enforcement and implementation remain a challenge. Reports of poor record-keeping in Nigerian public institutions, for instance, make enforcement of the Freedom of Information Law problematic.

One way to address this challenge is for the policy framework to include practical and measurable steps towards enforcement and implementation. Different stakeholders must be involved so that they can hold one another accountable and a structure in which they are collectively accountable to the populace should also be put in place. One way to do this would be to identify target groups in the population that represent specific interests and build an implementation framework and activities around that group, so that they can participate in the implementation and benefit from it in such a way that makes

them gatekeepers of implementation. Similar implementation strategies have been introduced in Japan, New Zealand and the United Kingdom (Involve, 2009, p. 5).

### **7.1.8 Awareness-raising and consultation with stakeholders**

As noted several times above, open government implementation requires meaningful collaboration between different groups in society. The process must be all-inclusive in order for it to achieve the desired results, especially since openness intrinsically involves how governments relate with their citizens and the kinds of political returns citizens enjoy from the governance process. open government is meant to provide effective channels for those in the government to engage with the people whom they represent (citizens) and to create avenues for citizens to provide feedback to the government on governance issues. Consequently, everyone is a stakeholder and, since society is made up of groups and subgroups that represent different interests and play different roles, all of these groups have a role to play in ensuring that open government is properly implemented.

Groups such as the media, non-governmental and civil society organizations, private businesses, government agencies, and professions and pressure groups have a role to play in ensuring that open government is properly implemented in their countries. Governments must engage these groups and work with them to invest collaboratively in developing open government initiatives and the programmes that drive them. Private businesses that can gain from the release of information can be encouraged to make financial investments in the collation and arrangement of data for release to the public. Non-governmental organizations can also be encouraged to provide human resource assistance. These kinds of partnerships enhance collective ownership of the process.

It is important to present open government as mutually beneficial to the government and its citizens, as well as to other stakeholders. Usually, related programmes are presented as an attack on the government, which means that public officials and government representatives are on the defensive when addressing issues and

programmes that fall under headings such as transparency and accountability. Instead, projects and partnerships should be introduced based on mutual benefits. The introduction of OGD in some parts of the United States, for instance, helped identify inadvertent revenue losses and enhance public sector effectiveness by allowing citizens to engage with OGD. The conversation about these initiatives and their programmes should always be presented as mutually beneficial.

After open government implementation has begun, there must be widespread awareness-raising so that citizens are aware of the steps being taken by government to improve transparency and accountability. In Kenya, one of the greatest failings of the Open Data Initiative was that most of the citizens for whom it had been introduced were completely unaware of the existence of the data portal. Government must engage popular media, such as radio shows, television and newspaper adverts, songs by popular artistes, and campaigns in schools to inform people of new initiatives introduced for the purpose of transparency, accountability and participation.

## **7.2 Conclusion**

Open government represents the latest effort by policymakers working at the global level to improve governance, and OGD is a powerful means of implementing open government in a data-driven world. Accordingly, governments interested in improving transparency, accountability and participation in their governance methods must find the most effective ways of doing this without neglecting their contextual realities.

In Africa, information and communications technology and digital processes are becoming increasingly important in everyday life, including governance, and it is important for governments to take advantage of the global development in new technologies to improve the quality of life for their citizens. One way of doing this is by making data openly available for citizens to use, which will in turn improve governance, among other things.

Transparency, accountability, participation, and innovation are equally important in present day Africa, and must be pursued together to enhance comprehensive development.

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## Annex

### Qualitative survey on citizens' engagement with open government data

#### About the survey

Sample	80 respondents
Locations	Comoros; Egypt; Ghana; Kenya; Nigeria; South Africa; Sudan; Uganda; UK; USA
Objectives	<p>To determine the level of stakeholders' engagement with open government data (OGD).</p> <p>To determine the nature and usefulness of stakeholders' engagement with OGD.</p> <p>To elucidate OGD implementation and usefulness for citizens.</p> <p>To assess open government strategy, implementation and sustainability.</p>
Methodology	<p>Questionnaires were administered via targeted online email campaigns between February and July 2011.</p> <p>The questionnaire was designed and administered in English.</p> <p>The survey was conducted by the Project Team comprising the Lead Consultant, Consultant and the researchers.</p>
Summary of findings	<p>60% of respondents were located in Nigeria.</p> <p>59% of respondents were male.</p> <p>53% of respondents were aged between 26 and 40 years.</p> <p>54% of respondents have Masters degrees or equivalent qualifications.</p> <p>58% of respondents are employed.</p> <p>29% of respondents work in the academic sector.</p> <p>48% of respondents have explored OGD from national governments.</p> <p>58% of respondents were interested in access to OGD related to education and skills.</p> <p>79% of respondents were interested in statistical data such as government performance statistics.</p> <p>45% of respondents are motivated by curiosity to work with OGD.</p> <p>60% of respondents "strongly agree" that OGD should be made available as quickly and as timely as possible.</p> <p>45% of respondents identified "corruption" as the most important issue facing their respective national governments presently.</p> <p>41% of respondents indicated that OGD is either "important" or "very important" in addressing the issue of "corruption".</p> <p>53% of respondents have used OGD in presentations, articles and reports.</p>

## Key findings of survey

### Open Government Data (OGD)

#### Profile of respondents

[COUNTRY]: Please select your country location below (or state your country in the space provided).

Cameroon

Ghana

Kenya

Morocco

Nigeria

South Africa

Others

Majority of the respondents were located in Nigeria (60%) and Egypt (19%). Other respondents were located in South Africa (4%); USA (4%); Uganda (3%); Kenya (3%); Sudan (1%); UK (1%); Ghana (1%) and Comoros (1%).

4% of respondents declined answering.

68% of our respondents were from the researcher's pre-selected locations – Nigeria; South Africa; Kenya; and Ghana. No respondents chose Cameroon or Morocco.

11. [GENDER]: Your gender. Please choose only one of the following:

Female

Male

59% of our respondents were male while 38% were female.

4% of respondents declined answering.

12. [AGE]: Your age. Please choose only one of the following:

Under 18

18–25

26–40

41–69

70 and over

Majority of respondents were within the age brackets 26–40 (53%) and 41–69 (26%).

16% of respondents were within the 18–25 year bracket but no respondent was under 18 years.

Only 1% of respondents were 70 and over.

4% of respondents declined answering.

13. [DEGREE]: Please select your highest level of education attained.

Secondary School (GCSE/O-Levels)

Diploma, Certificate

Undergraduate Degree (BA, BSc, etc.)

Masters Degree (MA, MSc, etc.)

Doctorate (PhD)

Majority of the respondents had a masters degree (51%), undergraduate degree (23%) or doctorate (11%).

Respondents with secondary school (GCSE/O-Levels) education accounted for 3% of sample while diploma/certificate holders formed 1%.

Respondents with other types of qualifications (fellowships) accounted for 3%.

4% of respondents declined answering.

Results Chart

**Profile of respondents**

14. [EMPLOY]: Please select the option that best describes your employment status.

Student	58% of the respondents were employed versus 21% retired and 1% unemployed.
Voluntary Work	5% were self-employed; 9% were business owners.
Self Employed	Voluntary workers and others (contract employment) each accounted for 1% of the respondents.
Business Owner	
Employed	Students accounted for 18% of the respondents.
Unemployed	4% of respondents declined answering.
Retired	
Others	

15. [SECTOR]: Please select the option that best describes the main sector in which you work, study or volunteer in?

Small- and Medium-Scale Enterprise	Majority of the respondents work in the academic sector (29%) and the non-profit sector (25%).
Private Sector (large scale)	SMEs and the Large Private Sector each account for 16% of the respondents while the public sector accounts 6%.
Public Sector (local, state or national)	
Academia	3% of respondents work in none of the listed sectors; 1% work in other sectors.
Non-profit (non- governmental, charity, faith-based, etc.)	4% of respondents declined answering.
None of the above	
Others	

**ENGAGEMENT WITH OPEN GOVERNMENT DATA**

1. [OGDXPLO]: Have you explored any of the following open government data directories?

	48%, 29% and 5% of our respondents have explored OGD from national, state and local governments respectively.
	40% of our respondents have explored international sources of OGD.
	36% of our respondents have never explored OGD from the listed sources while 1% have explored from sources other than those listed.
	4% of respondents declined answering.

## Profile of respondents

2. [OGDCLASS]: Which classes of open government data are you most interested in having access to?

The majority of our respondents were interested in access to OGD on education and skills (58%); population (54%) and government budget (48%).

44% and 46% of our respondents were also interested in accessing business and macro-economic data respectively.

Less than 30% of our respondents were interested in accessing weather (28%), transport (26%) and housing (26%) data.

4% of respondents were interested in OGD other than those listed (e.g. agricultural data).

1% of respondents were not interested in any OGD.

4% of respondents declined answering.

3. [OGDTYPE]: Which types of open government data are you interested in working with?

79% of our respondents were interested in statistical data such as government performance statistics.

Respondents were also interested in service data (56%); location data (31%) and real-time data (28%).

4% of respondents were not interested in the listed types of OGD and 3% did not know what type of OGD would interest them.

4% of respondents declined answering.

## Perceptions about open government data

4. [OGDMOTV]: From the table below, what are your motivations for working with or using open government data and how would you rank their importance?

45% of respondents considered "curiosity" as a very important motivation for working with OGD.

Respondents also considered "very important" motivation to come from: learning new skills (38%); solving a specific problem (34%); building an innovative product (33%); making a difference in my community (31%) and serving citizens better (30%).

'To make profit' and "To develop a website" were also very important motivations acknowledged respectively by 20% and 19% of our respondents.

4% of respondents declined answering.

5. [OGDINDX]: Please read the following statements and indicate how far you agree or disagree with them.

60% of our respondents "strongly agree" that OGD should be made available as quickly and as timely as possible.

51% of respondents "strongly agree" that OGD should be equally accessible by technical experts and inexperienced citizens.

41% of respondents "strongly agree" that OGD should be openly accessible online.

4% of respondents declined answering.

## Profile of respondents

6. [GOVISSU]: In your opinion, what is the most important issue facing your national government today?

45% of our respondents identified “corruption” as the most important issue facing their respective national governments presently.

19% of respondents adjudged insecurity as the most important issue facing government today.

An equal 6% of respondents considered the economy, leadership and accountability most important respectively.

Lack of data and unemployment were considered most important by 4% of respondents; and poverty by only 1%.

4% of respondents declined answering.

7. [OGDSOLV]: Based on your answer in (6) above, please indicate how important you think increased access to open government data is in addressing the issue.

41% of respondents indicated that OGD is either “important” or “very important” in addressing the issue of “corruption”.

18% of respondents indicated that OGD is either “important” or “very important” in addressing the issue of “insecurity” (i.e. terrorism).

5% of respondents equally indicated that OGD is either “important” or “very important” in addressing the issues of “lack of data”; “economy”; “transparency”; and “accountability”.

4% of respondents declined answering.

8. [OGDUSED]: In what ways have you used open government data, at any time?

A majority of the respondents (53%) have used OGD in presentations, articles and reports.

45% of respondents have used OGD in statistical analysis; while 43% have downloaded OGD datasets.

24% of respondents have never used OGD.

4% of respondents declined answering.

9. [OGDTECH]: From the list below, please rank how frequently you applied the tools and technologies during your use of open government data.

