



Papua New Guinea Open Data Policy and Framework

In compliance with EITI International Standard 2016 – Requirement 7.2

30 December, 2016

Table of Contents

	Page
Foreword	4-5
1. Purpose and Background	6-7
2. Definition of Open Data	7
3. Open Data Objectives	7
4. Open Data Implementation Strategy	7-9
5. Open Data Statement by MSG	9-11
5.1 General statement	9
5.2 Consistent with PNG's OGP Declaration	10-11
6. Open Data in the PNGEITI MSG Context	11-13
7. Open Data Principles	13-16
7.1 Completeness	14
7.2 Primary sources	14
7.3 Timeliness	14
7.4 Easy access	14
7.5 Machine readability	15
7.6 Non-discrimination	15
7.7 Use of open data standards	15
7.8 Licensing	15
7.9 Permanence	16
7.9.1 Data usage	16
8. PNG's Challenges in Open Data Policy Implementation	16-18
8.1 Risk of not meeting international standard and formats	16
8.2 Data accessibility	17
8.3 Capacity building for open data system	17
8.4 Limitation in use of open data due to high illiteracy and	18

lack of communication facilities

8.5 Poor regulatory framework and lack of transparency 18

9. Conclusion 18-19

Foreword

Approved by the EITI International Board on 9 December 2015, the Open Data Policy is now part of the 2016 EITI Standard.

This policy outlines recommendations on open data in implementation of the EITI. It draws lessons emerging from national level implementation and emerging international best practice (<http://eiti.org/standard/open-data-policy>).

The EITI Principles declare that “a public understanding of government revenues and expenditures over time can help public debate and inform choice of appropriate and realistic options for sustainable development” (EITI Principle 4). The EITI Standard therefore requires EITI reports that are “comprehensible, actively promoted, publicly accessible, and contribute to public debate” (EITI Requirement 7.1). Improving the accessibility and comparability of EITI data is essential to realise these objectives.

Papua New Guinea Extractive Industries Transparency Initiative Multi-stakeholder group (PNGEITI MSG) has agreed to implement the Open Data concept and sets out the principles and strategy for the implementation of the Open Data Policy and Framework, consistent with the EITI principles and standard.

The Policy is a step closer to bringing out data from current locked pdf files to more user friendly and provide easy access for the public to engage in debates and facilitate an environment for better policy making and management of the extractive sector. The open data concept should ensure data and information are easily accessible by the public and within the legal and legislative framework of the PNG extractive sector.

The collection, storage, processing and reporting of data will be as agreed by the PNGEITI MSG and consistent with the Government’s existing data collection, storage, dissemination and usage practice, consistent with PNG laws and the Government’s obligation to implement international initiatives such as the EITI concept, the OGP, the UN Charter on Open Data and Open Knowledge International.

PNG EITI Open Data Policy and Framework is basically a statement that outlines what the MSG intends to do to improve PNG’s reporting obligation as an EITI implementing country. This Open Data Policy Statement is structured in 8 areas. Firstly, there is a discussion on the purpose of implementing the Open Data Policy. Secondly, it provides the definition of Open Data. The third section provides the objectives. The

fourth section discusses implementation strategy. Section 5 provides MSG's Open Data Statement and Section 6 discusses the Open Data Policy in the context of PNGEITI MSG process. Section 7 outlines 10 principles (the Sunlight Foundation principles) on Open Data and Section 8 lists some of PNG's challenges to implementation of Open Data policy. The paper finally concludes by making a specific recommendation to engage with CSOs in the initial stages of the policy implementation.

1. Purpose and Background

PNG signed up to implementing EITI in 2013 and is a candidate country. It published its first Report in February this year and is preparing the second report to be released end of this year. PNG is still on a learning curve on the EITI process and its reporting requirements and standards. PNG Government supports the EITI concept and its principles as this would greatly promote transparency, accountability and enhance good governance in the extractive sector, consistent with EITI standard.

Open data policy can increase transparency, enhance accountability and good governance, stimulate public debates, address corruption and better delivery of public services through informed public policy making process.

PNG does not have an open data policy. It does not have a whole of government approach to data collection, documentation and storage; whether it be financial data, economic or social data and statistics. Though some data are available at the national and sub-national levels of government, there is no central agency (central data portal) where these data are stored. Data are mostly kept in non-electronic formats across various agencies and institutions and obtaining these may be difficult and time consuming. Where data are available these are in many times out of date and not readily available to be used. This problem is the same for all entities across the extractive sector.

Contractual information and data from resource industries are sometimes difficult to obtain because these are protected by confidentiality clauses, business competitiveness and secrecy provisions. For example, contractual information between the company and the State, and details on company ownership and tax revenue data are governed by secrecy provisions and are not easily obtainable. Many government entities have access to internet but this can be unreliable at times because of high usage cost and unreliable telecommunication network and IT infrastructure support systems.

PNG is part of the global community and stands to benefit from Open Data Policy and Framework. Data relating to natural resources revenue and expenditure should be easily accessible, user friendly, easily understood and should raise public debates. The PNGEITI MSG agrees to implement the Open Data Policy, consistent with EITI Standard which should facilitate better data interpretation and dissemination for

greater public consumption and debates on issues affecting management of the extractive sector.

2. Definition of Open Data

The open definition, according to Open Knowledge International (<http://okfn.org>) sets out the principles that define “openness” in relation to *data and content*. It precisely defines “open” in terms of “open data” and “open content” and thereby ensures quality and encourages compatibility between different pools of open material. The Open Knowledge International sums it up as:

“Open means anyone can freely access, use, modify, and share the data and information for any purpose (subject, at most, to requirements that preserve provenance and openness”.

Or simply put: “open data and content can be freely used, modified, and shared by anyone for any purpose”.

3. Open Data Objectives

According to EITI International 2016 Standard, Open EITI data can increase transparency about government and business activities, and raises awareness about how countries’ manage their natural resources and how extractives revenues are spent. The Open Data provides strong incentives for resource monies to be used most effectively for better service delivery (<http://eiti.org/standard/open-data-policy>).

Open data promotes accountability and good governance, enhances public debate, and helps to combat corruption. Providing access to government data can empower individuals, the media, civil society, and businesses to make informed choices about the services they receive and the standards they should expect. Open data, can also be valuable tool for government in improving policy making and sector management. Free access to, and subsequent re-use of open data are of significant value to the public and the economy.

4. Open Data Implementation Strategy

Consistent with requirements of the EITI Standard approved by the EITI International Board on 9 December 2015 (<http://eiti.org/standard/open-data-policy>), the PNGEITI MSG will implement the Open Data Policy in the following manner:

- (a) Orient the PNG Government systems and processes towards open data by default. The MSG will take into account PNG laws and the legislative framework, and any other international legislation, particularly concerning intellectual property, personally-identifiable and sensitive information and its implication on PNG in terms of implementing Open Data Policy. If there are any constraints and to the success of policy implementation, deliberate actions (through reforms and legislative amendments) will be taken to address them to ensure the Open Data policy is firmly implementation for the long term benefit of the country;
- (b) MSG will endeavour to ensure that data used in the annual EITI reports are fully described and these are available openly so that users have sufficient information to understand their strengths, weaknesses, analytical limitations, and security requirements, as well as how to process and use the data;
- (c) MSG will endeavour to release data in the annual EITI reports as early as possible (early part of the reporting year, around September or October), allowing MSG members, users and relevant entities to provide feedback, and then continue to make revisions to ensure the highest standards of open data quality is published;
- (d) The MSG will make efforts to release data under an open license that allows users and the public to freely obtain and re-use it;
- (e) The MSG will explore opportunities to share technical expertise and experiences with other EITI implementing countries and relevant organisations involved in Open Data to maximise the potential of open data;
- (f) The MSG will work to increase open data literacy and encourage people, such as developers of applications and civil society organisations that work in the field of open data promotion, to unlock the value of open data;
- (g) The MSG will ensure that data is interoperable with PNG practice and international standards, including adopting data standards approved by the EITI Board and additional guidance provided by EITI International Secretariat;
- (h) Where possible, use unique identifiers to link data across years of reporting or different sources;

- (i) The MSG will work towards mainstreaming the creation of open data for EITI into government systems to ensure timeliness, data quality, reuse and cost effectiveness; and
- (j) The MSG will ensure data are provided in granular and machine-readable formats.

The PNGEITI MSG will implement the EITI Open Data Policy, complementing other Government of PNG initiatives including the Open Government Partnership (OGP), the G8 Open Data Charter and the 10 Principles of the Sunlight Foundation for Opening up Government Information.

5. Open Data Statement by MSG

5.1 General statement

The PNGEITI MSG has agreed on the following measures to ensure successful implementation of the Open Data Policy and Framework in the country:

- In annual EITI reports to be endorsed by the MSG and published, the MSG will endeavour to ensure that all data are made available in an open manner, easily accessible for use and re-use by the public. Every effort will be made to have the data produced in excel spreadsheets, machine readable data in both granular and aggregated and summarised forms on the PNGEITI data portal;
- The MSG will encourage publication of data through the PNGEITI website, the Departments of; Petroleum and Energy, Treasury and Finance, National Planning and Monitoring, the Internal Revenue Commission, and the Mineral Resources Authority on-line data bases and registries or any other government registry that will be easily accessible by the public;
- The MSG through the Beneficial Ownership Roadmap will identify an open data portal or a central registry platform that will ensure data are stored in easily readable formats and publicly accessible consistent with the EITI Open Data principles;
- The MSG will continue to review and refine this open data platform by strengthening and reforming the current systems legal legislative constraints to

ensure it truly meets the intended requirements of the EITI International standard in as far as open data is concerned;

- The MSG will continue to seek, learn and share with other international best practices in implementing the open data policy framework in the context of the EITI global standard;
- The MSG will actively seek to ensure there is technical capacity and skills at the country level to utilise, interpret, disseminate, manipulate, process, promote data and make available in open formats, user-friendly and accessible to the public through the institutions and agencies of government. The MSG, through the EITI process will assist these institutions, and also companies and NGOs or think-thanks to build up capacities in these entities for producing, collating and processing data in an open format for public use; and
- Going forward into the future, the MSG will ensure that the open data policy is widely replicated and accepted across all government institutions in the format consistent with the EITI Global standard and the OGP principles.

5.2 Consistent with PNG's OGP Declaration

The statements below were directly taken from PNG Government's OGP Declaration which are complementary to EITI's Open Data Policy.

PNG has drafted its First OGP National Action Plan. The EITI's requirement for implementing countries to adopt the Open Data Policy is complementary to our declaration to Implement OGP principles. Like other OGP member countries, PNG commits to upholding the principles of open and transparent government.

The MSG **acknowledges** that people around the world are demanding more openness in government. They are calling for greater civic participation in public affairs, and seeking ways to make their governments more transparent, responsive, accountable and effective. The MSG will ensure PNG follows the same path in bringing about openness through the OGP principles and the EITI standards.

The MSG **recognises** that countries are at different stages in their efforts to promote openness in government, and that each country pursues an approach consistent with

its national development priorities and circumstances, and the aspirations of its people. The MSG will ensure that Open Data Policy is implemented, addressing any implementation constraints (legal and legislative framework), and consistent with the EITI standard.

The MSG **accepts** the EITI Open Data Policy and agrees to implement it, consistent with OGP principles. It will take on the responsibility to strengthen its commitment to promote transparency, fight corruption, empower citizens, and harness the power of new technologies to make government more effective and accountable.

The MSG will **uphold the value** of openness in its engagement with citizens to improve services, manage public resources and embrace principles of transparency and open government with a view toward achieving greater prosperity, well-being, and human dignity in our country.

6. Open Data in the PNGEITI MSG Context

PNGEITI MSG welcomes EITI's Open Data Policy concept as it will further enhance the Government's efforts to enhance transparency and accountability through informed public debates on public policies for improved development outcomes for all citizens.

The MSG was established in 2013 to provide guidance and oversight on the EITI implementation. One of MSG's main activities is the production of annual EITI reports as a requirement under the EITI Standard. Since the establishment of the MSG, members representing Government, Civil society and the Industry have worked together in the true spirit of collaboration towards completion of the first report. The first report covering the financial year 2013 was launched and published by the Prime Minister in February 2016. The MSG continued to provide this oversight and guidance in the production of the second report which covers the financial year 2014.

The MSG's efforts have been consistent with the objectives of the EITI International Standard, and particularly the new 2016 EITI Standard that has greatly strengthened the demand for open access to EITI reporting through the use of data.

According to the EITI Standard 2016, EITI Requirement 7 talks about the result and impact of reporting. It does not only require implementing countries to print their annual

EITI reports and publish them online (7.1a); in points 7.1b and c, but they are also urged to:

- agree upon a clear strategy with regard to access, sharing and re-use of EITI data under an open licence and to advise users that the information may be used without prior consent; and
- place the EITI report online in an Open Data format (excel spreadsheets) and make it generally known that the report is available.

EITI Requirement 7.2 and the EITI Open Data Directive also encourages implementing countries to design access to EITI-relevant data in such a way that it can be compared with publicly available data and understood as fully as possible. The PNG EITI MSG considers Open Data concept to be an important next step in unlocking data from current EITI reports for easy access and consumption by the public and sharpens the tools for better understanding and public debates. Adopting an Open Data Policy in PNG will further enhance and promote transparency in government and industry players in the extractive sector. It can contribute to also bringing about accountability, good governance, public debates and dialogues, and efficiency and better management of revenues generated from the extractive sector.

The PNG EITI Open Data and Framework builds on the 10 basic principles relating to data collection and disclosure within the context of EITI annual reporting activity. The MSG through the Terms of Reference for the Independent Administrator, approves the revenue streams to be reported and the level of data to be disclosed. With the Open Data concept, this level of reporting will now be reviewed to ensure the information is published in an open data format in compliance with the new EITI standard. The MSG will ensure that in its endeavour to meet the EITI Open Data standard, care will be taken to ensure that such data and information released openly must safeguard the interests and business confidentiality of companies involved in the sector. This is to ensure their competitiveness is not compromised. The MSG will ensure that information provided will be solely used for the EITI reporting purposes and not published in an unauthorised manner, without approval of the MSG and consensus from companies involved in the reporting process.

PNG is driving forward the national agenda on OGP. PNG was officially accepted as the OGP member in 2015. As a member, PNG is required to translate and adapt OGP

principles and guidelines into its National Action Plan and use it to achieve good governance. PNG's First National Action Plan focuses on 4 principles (out of 7 OGP clusters of commitment):

- **Access to information** – strengthen mechanisms for citizens to access information as it contributes to transparency and accountability.
- **Public participation** – the OGP First National Action Plan hopes to encourage effective citizen participation.
- **Fiscal transparency** – the OGP First National Action Plan will ensure that public finance transcending at the national to sub-national levels must be accounted for and public procurement processes must be transparent.
- **Extractive industry transparency** – to ensure good governance in PNG's rich natural resource sector. This is to ensure that tax and revenue generated from the extractive resources sector supports the development of communities and improves citizens' welfare. Like in other OECD and G8 countries, PNG's implementation of Open Data Policy through the EITI reporting process will contribute to achieving its OGP National Action Plan and complement the objectives of EITI implementation in the country of bringing about transparency and accountability in the extractive sector.

7. Open Data Principles

In October 2007, 30 open government advocates met in Sebastopol, California to discuss how government could open up electronically stored data for public use. Since then some governments have attempted to make some data available to the public, which had paved the way forward for open and better data. The conference was funded by a grant from the Sunlight Foundation that resulted in eight principles that would empower public's use of government held data.

The PNGEITI MSG broadly agrees with the Sunlight Foundation's principles to which government data is open and accessible to the public. According to the Sunlight Foundation, each principle exists along a continuum of openness. The principles are completeness, primacy, timeliness, ease of physical and electronic access, machine readability, non-discrimination, use of commonly owned standards, licensing, permanence and usage costs. These principles are listed below:

7.1 Completeness

Datasets released by the government should be as complete as possible, reflecting the entirety of what is recorded about a particular subject. All raw information from a dataset should be released to the public, except to the extent necessary to comply with government laws regarding the release of personally identifiable information.

7.2 Primary sources

Datasets released by the government should be primary source data. This includes the original information collected by the government, details on how the data was collected and the original source documents recording the collection of the data. Public dissemination will allow users to verify that information was collected properly and recorded accurately.

7.3 Timeliness

Datasets released by the government should be available to the public in a timely fashion. Whenever feasible, information collected should be released as quickly as it is gathered and collected. Priority should be given to data whose utility is time sensitive.

7.4 Easy access

Datasets released by the government should be accessible as much as possible, with accessibility defined as the ease with which information can be obtained, whether through physical or electronic means. Barriers to physical access include requirements to visit a particular office in person or requirements to comply with particular procedures (such as completing forms or securing prior approvals). Barriers to automated electronic access include making data accessible only via submitted forms or systems that require browser oriented technologies (e.g., Flash, JavaScript, cookies or Java applets). By contrast, providing an interface for users to download all of the information stored in a database at once (known as “bulk” access) and the means to make specific calls for data through an Application Programming Interface (API) make data much more readily accessible.

7.5 Machine readability

Machines can handle certain kinds of inputs much better than others. For example, handwritten notes on paper are very difficult for machines to process. Scanning text via Optical Character Recognition (OCR) results in many matching and formatting errors. Information shared in the widely used PDF format, for example, is very difficult for machines to process or format. Thus, information should be stored in widely used file-formats that easily lend themselves to machine processing. (When other factors necessitate the use of difficult to parse formats, data should also be available in machine friendly formats.) These files should be accompanied by documentation related to the format and how to use it in relation to the data.

7.6 Non-discrimination

“Non-discrimination” refers to who can access data and how they must do so. Barriers to use of data can include registration or membership requirements. Another barrier is when only some applications are allowed access to data. At its broadest, non-discriminatory access to data means that any person can access the data at any time without having to identify him or herself or provide any justification for doing so.

7.7 Use of open data standards

Commonly owned (or “open”) standards refers to who owns the format in which data is stored. Sometimes that program is unavailable to the public at any cost, or is available, but for a fee. For example, Microsoft Excel is a commonly used spreadsheet program which costs money to use. Freely available alternative formats often exist by which stored data can be accessed without the need for a software license. Removing this cost makes the data available to a wider pool of potential users.

7.8 Licensing

The imposition of “Terms of Service,” attribution requirements, restrictions on dissemination and so on acts as barriers to public use of data. Maximal openness includes clearly labelling public information as a work of the government and available without restrictions on use as part of the public domain.

7.9 Permanence

The capability of finding information over time is a problem. Information released by the government online should be sticky: It should be available online in archives. Information is often updated, changed or removed without any indication that an alteration has been made. Or, it is made available as a stream of data but not archived anywhere. For best use by the public, information made available online should remain online with appropriate version-tracking and archiving over time.

7.9.1 Data usage cost

One of the greatest barriers to access to publicly available information is the cost imposed on the public for access. Governments use a number of bases for charging the public for access to their own documents: the costs of creating the information; a cost recovery basis (cost to produce the information divided by the expected number of purchasers); the cost to retrieve information; per page or per inquiry cost; processing cost; the cost of duplication etc. Most government information is collected for governmental purposes, and the existence of user fees has little to no effect on whether the government gathers the data in the first place. Imposing fees for access skews the pool of who is willing (or able) to access information.

8. PNG's Challenges in Open Data Implementation

The PNGEITI MSG recognises that PNG is part of the global community and stands to benefit from this open data policy and framework. Data relating to natural resources revenue and expenditure should be easily accessible, user friendly, easily understood and should raise public debates. However, the MSG is aware of the challenges and risks that PNG as an EITI Open Data implementing country needs to address as it works towards implementing the Open Data policy framework in the country:

8.1 Risk of not Meeting International Standards and Formats

A key challenge for a developing country like PNG is ensuring that available data is able to meet international standards and formats. It is difficult to collect and document data across all government departments and/or natural resource industries. The MSG believes that the open data initiative works well to suit the needs of advanced economies/countries or technologically advanced public sector institutions with well-established telecommunication and IT infrastructure systems. These countries store

data and information in electronic formats and in a centralized national data base/system. It will be a real challenge for PNG to implement a perfect open data system because currently it is difficult and time consuming to extract data – mostly raw and unprocessed data that are stored manually across many government departments from national to sub-national levels. There are currently not many public portals containing huge variety of datasets. Many of these data are stored in different formats, structures, standards and one of the biggest challenges is the non-existence of a compatible standard/format.

8.2 Data accessibility

A significant barrier for PNG is data accessibility which is difficult. Datasets are stored in different formats, different definitions, codes, quality and quantity, and so forth. Many of these datasets require standardization and need to be formatted to international standard (e.g., adoption of new GFS as recommended by IMF). Standardizing data sets requires coordination between various entities to share infrastructure, creating user demands, develop data access methods, developed mechanisms to safeguard confidentiality issues, protecting privacy, maintaining data quality and so forth.

8.3 Capacity building for open data system

To develop an Open Data policy framework, PNG Government will need to firstly provide resources to strengthen capacity of existing State entities and departments that collect, process and document data such as the National Statistical Office (NSO), the Bank of PNG, the Department of Treasury, the National Research Institute, the universities, the National Mapping Bureau, the Investment Promotion Authority, etc. This will enable these institutions to collect, document and create database to be maintained and updated regularly. An open data policy will be useful for the government, industry and civil society organizations but the issue for PNG now is to decide whether these data will be held centrally by a government entity, or across several departments and entities.

8.4 Limitation in use of open data due to high illiteracy and lack of communication facilities

Not all government departments and agencies have easy access to internet and other hi-tech telecommunication systems. Where these facilities are provided they are often unreliable due to lack of reliable and sustained telecommunication and IT infrastructure systems – typical of any developing country. More so, 85% of the population lives in rural areas where illiteracy is very high and accessing an internet through computers and mobile phones are not existent. This presents a challenge because the use of data by people who are affected most by the extraction of their natural resources, for instance will not have access to these critical information to debate on issues that affect them and their communities.

8.5 Poor regulatory framework and lack of transparency

One of the biggest challenges in PNG in the extractive industry is lack of transparency in information relating to financial transactions, accountability, transparency and particularly, the impact on the people and communities (landowners) directly affected by resource exploitation. The government will need to strengthen these areas before developing an open data policy framework to ensure policy effectiveness. PNG EITI has already progressed work on this and will hopefully address some of the issues going forward.

Further, PNG does not publish usable data on extractive industries due to lack of readily available data, awareness, capacity and legislative mechanisms. Although there are some data available and there are certain legislations that restrict sharing and the use of these data openly. It should be the responsibility of all stakeholders to share data including those involved in the extractive sector.

9. Conclusion

Given that PNG's capacity to develop and sustain open data is not yet there and that more than 80% of its population is illiterate and lives in rural settings where accessibility to computers/internets, telephones and other social media is very limited or non-existent, it would work well for the Government to work/partner with civil society organizations at community levels. Strengthening and empowering CSOs and using them to play an advocacy role in getting other stakeholders to promote an open and accountable extractive sector through disclosure of critical information like contracts,

revenue payments, beneficial ownership and receipts would be the least PNG could do at this early stage.

What PNG could approach at this stage on open data system would be not so much about high tech applications and solutions, but ensuring there is adequate level of information that promotes accountability and transparency in the extractive industry. This will ensure that people who are directly impacted by resource extraction are kept informed so that they engage in constructive debates on issues that may affect them. It is therefore necessary for the Government to partner with CSOs to disseminate important data and information that is understandable by people, thus empowering them to understand their rights. We believe that an open data initiative driven by community needs would be the most effective way to ensuring that ordinary people get maximum benefit from resource extraction and that there is accountability and transparency at all levels of government.

The MSG would like to draw its attention to a 'Scoping Study for EITI Data Reporting and Access Standards Report' by the World Bank in which it categorises countries into three levels – the 'good', the 'better' and the 'best' in terms of each implementing country meeting EITI standards.

'Good' refers to reporting standards that meet the minimum data output provided under each EITI requirement. 'Better' refers to reporting standards that are enhancements of data outputs covered under the 'good' category, and 'best' refers to reporting standards that represents the highest international benchmarks and standards and are considered to provide comprehensive information, beyond the minimum data requirements. It is envisioned that PNG will start from the very minimum level of 'good' category in the Open Data Policy implementation.