Seychelles Spatial Data Sharing Policy 2020 (SSDSP – 2020)

Centre for Geographic Information Services

Ministry of Lands and Housing

Government of Seychelles

Executive Summary

The importance of access to information for various purposes, including those of economic, environmental and social well-being of our society is crucial. The majority of information used in government somehow has a geographic dimension – for instance these are attached to a parcel of land, transportation, tourism establishments, river, to name a few. There are all kinds of descriptive information or attributes that can easily be linked to a particular place to present a rich and detailed picture. For example, having knowledge where an endangered species is located can help conservationist to make better informed decision about the survival of that species. Geographic Information Systems (GIS) not only offer unique opportunities to analyze and compare these disparate types of information but open up new possibilities to deliver both information and services. The importance of GIS can be seen across many applications, for example socio-economic development, public health, environment, transport service, land administrations and moreover, these applications oftentimes share many common information needs. Therefore, spatial data created by one organization can be used by other private and public organizations with similar needs, so sharing can yield considerable efficiencies.

The Seychelles Spatial Data Sharing Policy (SSDSP) was developed by the Centre for Geographic Information Services within the Ministry of Lands and Housing (MLH) in collaboration with other Ministries, Departments and Agencies as well as some private stakeholders. The policy aims to provide an enabling environment and platform for proactive sharing and open access to spatial data generated through public funds. The SSDSP will undeniably be applicable to all spatial data created, generated, collected and archived using public funds directly or through authorized agencies by various Ministries, Departments, Organizations, Agencies and Autonomous bodies. More importantly the policy aims to encourage sharing from non-governmental and private entities.

In the absence of a national standards in the Seychelles, the policy adopted the international standards from the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM). The lack of a governance model and high-level leadership has made the policy formulation process somewhat more complex. However, with the adaptation of this policy it is crucial that an executive level

committee will be responsible for matters relating to its implementation. Furthermore, this committee will have a wide representation across public, private, academic sectors and civil society and will ensure the successful application of the National Spatial Data Infrastructure (NSDI). It is good to note that the NSDI is a data structure implementing a framework of geographic data, metadata, users and tools that are interactively connected in order to use spatial data in an efficient and flexible way. It is expected that once established, the NSDI, should be the collaborative entity for effective cross-sectoral geospatial data sharing. The terms of reference and function of the committee should be clearly defined by its members and its relevancy will depend on the support of the government.

Predominantly, the SSDSP will have to adhere to existing policies, laws and regulations notably the Access to Information Act (2018). The majority of public authorities spend money collected from taxpayers to collect data including spatial ones, and as such, people have the right to access information as stipulated in the aforementioned Act. However, it is noted that there are problem accessing data created by public bodies from public funds to civil society. The SSDSP is therefore intended to bridge such a gap by promoting data sharing and accessibility to spatial data created in the Seychelles for the betterment of decision making in national planning and development.

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Acronym

CD	Compact Disk
GIS	Geographic Information System
GML	Geography Markup Language
GPS	Global Positioning System
ISO	International Organization for Standardization
JPEG	Joint Photographic Experts Group
NGO	Non-Governmental Organizations
NGSC	National Geospatial Steering Committee
NGTC	National Geospatial Technical Committee
NSDI	National Spatial Data Infrastructure
OGC	Open Geospatial Consortium
PNG	Portable Network Graphics
SSDSP	Seychelles Spatial Data Sharing Policy
UN-GGIM	United Nations Committee of Experts on Global Geospatial Information Management
UTM	Universal Transverse Mercator
WFS	Web Feature Service
WGS84	World Geodetic Systems 1984
WMS	Web Map Service

1. Preamble

Public authorities spend money collected from taxpayers to make decisions that can significantly affect many people's lives. As such people have the right to get access to information for good reason other than exceptional circumstances under non-disclosure. Giving access to information will help make public bodies accountable and allow the public to be better informed, make better decisions and become more productive. There has been an increasing demand by the community, that such data collected with the deployment of public funds should be made more readily available to all. After all, appropriate access to information held by public authorities, as well as getting the public involved in decision making is one component of principle 10 under the United Nations Declaration on Environment and Development (Rio de janeiro, June 1992).

Section 8 of the Access to Information Act (2018):

'*Subject to this Act, every person has a right to 'Right of access to information from a public body.*'

The full and open exchange of spatial data is grounded within a context established by important principles of data sharing, such as the following: *Simplicity, non-exclusivity, fairness, non-discrimination, acknowledgement and attribution, transparency, promptness.*

Majority of data that is created by public bodies from public funds remains inaccessible to civil society, though some of these data are non-sensitive in nature and its applications could be for scientific, economic and developmental purposes. The Seychelles Spatial Data Sharing Policy (SSDSP) is intended to be applicable for all spatially sharable data either digital or analogue created by public funds by various Ministries, Departments, Agencies, and Organizations of Government of Seychelles. Furthermore the SSDSP is designed to promote sharing and accessibility to spatial data created in the Seychelles for national planning and development.

2. Definitions

Specific terms used in this document include:

- **Anonymization**. Use of techniques that convert confidential data into protected data - typically through removal or masking of identifying information from datasets.
- **Coordinate System** is a reference system used to represent the locations of geographic features, imagery, and observations, such as Global Positioning System (GPS) locations, within a common geographic framework.
- **Dataset** means any organized collection of data.
- **Data Provider** or **Dataset Provider** is an organization that provides data and/or Metadata under this Agreement.
- **Datum** or **Geodetic Datum** a coordinate system, and a set of reference points, used for locating places on the Earth.
- **Derivative Works** are works based on or derived from one or more existing works. For the purposes of this document, derivative works include derived data and analytical products, including but not limited to: research papers, analytical studies, data visualizations, derived indicators, aggregated and/or derived databases, and other outputs (e.g. publications, CDs, mobile device applications, blogs, online data products, etc.) created using the Dataset(s) and Metadata in question.
- **Map Projection** is a systematic transformation of the latitudes and longitudes of locations on the surface of a sphere or an ellipsoid into locations on a plane. Map Projections are necessary for creating maps. All Map Projections distort the surface in some fashion. Different Map Projections exist in order to preserve some properties of the sphere-like body at the expense of other properties.
- **Metadata** are defined as ‘data about data’. They help understand the meaning of data, or provide useful information about its provenance or licensing status.
- **National Spatial Data Infrastructure** is the technology, policies, standards, and human resources necessary to acquire, process, store, distribute, and improve utilization of geospatial data.
- **Non-Governmental Organizations** (also known as NGOs) are organizations independent of any government.
- **Personally Identifiable Information (PII)**. Any information that permits the identity of an individual to be directly or indirectly inferred, or any information which is linked or linkable, or may be attributed, to that individual.

- **Raster Data** consist of a matrix of cells (or pixels) organized into rows and columns (or a grid) where each cell contains a value representing information. Types of Raster Data may include: scanned maps and plans, aerial and satellite imagery.
- **Spatial Data** also known as geospatial data, describe information identifying the geographic location and the properties of natural or administrative features on the earth. Such data consist of three parts, namely the information on the location of the feature (XYZ coordinates), the physical or logical properties of the feature (attribute data) and the administrative description of the data set (metadata).
- **Time Series** is a sequence of data points or observations made about an Indicator, over a continuous time interval.
- **Vector Data** uses the simple geometric objects of points, lines, and areas (polygons) to represent spatial features. For example buildings (points), roads (lines) and land parcels (polygons).

3. Need for Policy

An essential component of an informed society is access to information. Spatial data is a subset of the vast amount of valuable information that is generated and/or maintained nationally within government and private entities. Effective planning of socio-economic development processes depend on quality data and as such there is a need to facilitate data sharing among all spatial data owners and users in order to prevent duplication of efforts and loss of efficiency of planning activities focussed on national development and inherently inform and empower citizens in general. Effective and efficient sharing of spatial data among spatial data owners and between the former and the public calls for data standards and interoperable systems. Hence, the Seychelles Spatial Data Sharing Policy aims to provide an enabling environment and platform for providing proactive sharing and open access to shareable spatial data. We also see this as a precursor to the establishment of a National Spatial Data Infrastructure (NSDI) for the Seychelles.

4. Purpose

The objective of this policy is to facilitate access to spatial data in both human readable and machine readable forms within the framework of existing legislation and policies, thereby permit wider accessibility and use of spatial data to enhance decision-making for socio-economic development.

5. Scope of this Policy

The Seychelles Spatial Data Sharing Policy will apply to all spatial data created, generated, collected and archived using public funds provided by Government of Seychelles directly or through authorized agencies by various Ministries, Departments, Organizations, Agencies and Autonomous bodies.

6. Context

6.1. Information as Infrastructure

The world is experiencing a fourth industrial revolution as we transition to what is dubbed the information age. This revolution is built upon the internet and an infrastructure of fundamental datasets. The term infrastructure is used here in the same sense as the road network is part of the fundamental infrastructure required to support transportation.

To help achieve this transition, many countries are building national data infrastructures. For instance, the United Kingdom has recently recognised that integrating authoritative key data registers into a coherent data infrastructure will, not only make Government more cost-effective, but also the interaction for citizens and businesses with Government quicker and more efficient .

One of the primary components of a data infrastructure is the location of a nation's assets including land, natural resources, the built environment; the results of high impact processes such as climate change and urban planning; and events, such as flooding. This is because "everything happens somewhere" and without knowledge of location (or spatial position), decision making on many matters of national importance is significantly impaired. We use the term National Spatial Data Infrastructure (NSDI) as a short hand for the policy, capacity building, technical and economic activities

necessary to create the required location (spatial) information to underpin social and economic development.

Creating an NSDI is underpinned by effective data sharing policy. Without such a policy for sharing, it is inevitable that organizations will create data to suit their own needs without consideration of wider economic and societal benefits that will flow from a nationally collaborative approach.

This policy will help in addressing issues relating to spatial data sharing and its legitimacy.

6.2. Technological Advances

Global software innovations as well as ways of thinking have had a big impact on spatial information enabling agencies to deliver a better service to the customers. Furthermore, new methodologies have made it possible to produce and manage data in a more controlled environment and up the required standards.

6.3. Policy, Legislative and Regulatory Framework

Spatial data will remain the property of the governmental/non-governmental entity which collected them and reside in their IT enabled facility for sharing and providing access. Access to spatial data under this policy will not be in violation of any Acts and policies of the Government of Seychelles in force.

All the spatial data generating through public funds for the Government of Seychelles will adhere to the provisions available under the policies:

- Access to information Act 2018
- Copyright Act 2014
- Land survey Act 1987
- Data Protection Act 2002 (not in force)
- Town and Country Planning Act 2012

6.4. Document Structure

The remainder of this document is organized as follows:

Chapter 2: Spatial data – scope of the data covered by the policy, with emphasis on what is regarded as fundamental spatial data.

Chapter 3: Governance – how the policy will be overseen and implemented

Chapter 4: Standards – the underpinning mechanisms which will support effective sharing.

Chapter 5: Spatial Data Management – how the spatial data is to be managed

Chapter 6: Access and Distribution – the principles of arrangements for accessing spatial data and how it will be distributed.

Chapter 7: Legal Issues – transparency, ownership, copyright, liability

Chapter 8: Pricing and Licensing – principles for pricing of fee-based products and reference to licensing models.

Chapter 9: Use Support – what users can expect.

7. Spatial Data

7.1. Fundamental Data

Fundamental data sets are data, for which there is a justified need for national consistency and development by a great variety of users inside and outside of the governmental institutions to enable them to meet their objectives. Availability of fundamental data is vital for further development of the infrastructure of the country as well as to the realization of economic, social and environmental benefits.

The United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) has prepared a list of the default themes of data that form the building blocks of an NSDI. These shall be covered by the Seychelles Spatial Data Sharing Policy and are as follows:

- Global Geodetic Reference Framework
- Addresses
- Buildings and Settlements
- Elevation and Depth
- Functional Areas
- Geographical Names
- Geology and Soils
- Land Cover and Land Use
- Land Parcels
- OrthoImagery
- Physical infrastructure
- Population Distribution
- Transport Network
- Water

In the context of the Government of Seychelles the following additional themes are also covered by this policy:

- Meteorological
- Marine Spatial Planning
- Flight information

- Boat/vessels routes

Definitions for each of these themes can be found in UN-GGIM document:

http://ggim.un.org/meetings/GGIM-committee/8th-Session/documents/E-C20-2018-7-Add_1-Global-fundamental-geospatial-data-themes.pdf

7.2. Non-fundamental Spatial Data

These are datasets that are not covered by the above theme definitions. Many will be derivative works, produced for purposes of analysis or to support specific decisions and may involve use of fundamental data. In other cases, non-fundamental data will be created for local area rather than offering national coverage. Often the users of such datasets will be a small number of specialists.

Non-fundamental datasets are not explicitly covered by this policy although national legal provisions related to privacy, copyright and licensing will apply.

8. Governance

8.1. Centre for Geographic Information Services

The Centre for GIS, is the body mandated by the Seychelles Government to provide geographic information services within the Seychelles for government, non-governmental bodies and public alike through services, for example, map production, geospatial data collection and management, GIS support services (technical support), training and consultation. Additionally, the Centre for GIS has been tasked to design and formulate the national policies for Spatial Data Infrastructure (SDI), data standards and interoperability in conjunction with other key stakeholders.

The Centre for GIS shall provide administrative support to the committees mentioned hereunder.

8.2. National Geospatial Steering Committee

The National Geospatial Steering Committee, hereafter referred to as NGSC, shall consist of senior decision makers from Government and Parastatal organizations, the Private Sector and Non-Governmental Organizations (NGO) representing both suppliers and users of spatial data. The Minister of Habitat, Infrastructure, Land and

Transport shall be responsible for appointing the steering committee and approving the selection of the chair person.

The Steering Committee shall be responsible for defining the Seychelles Spatial Data Sharing Policy and matters relating to its implementation.

8.3. National Geospatial Technical Committee

The National Geospatial Technical Committee, hereafter referred to as NGTC, shall consist of members from Government and Parastatal organizations, the Private Sector and Non-Governmental Organizations (NGO) representing both supplier and user communities.

It shall receive direction from the National Geospatial Steering Committee and provide advice on the technical implementation of the Seychelles Spatial Data Sharing Policy.

8.4. Policy Transparency

The Seychelles Spatial Data Sharing Policy may be amended by the NGSC as and when necessary but will be reviewed periodically every 5 years through a consultative process to ensure that it remains relevant and transparent.

9. Data Standards

9.1. Introduction

Standardization is of paramount importance to enable interoperability of data and connectivity of information systems. Standards enable spatial information to be accessed by different users, applications and systems, and from different locations.

Standardization enables consistent implementations across multiple applications and systems but permits different implementation technologies to be used for storing data in computer systems.

The Seychelles Spatial Data Sharing Policy requires that International standards are adopted to avoid the complexity and cost of developing bespoke national standards.

9.2. Interoperability

The Open Geospatial Consortium (OGC) standards will be used to technically implement interoperability between servers supplying and consuming data covered by

the national spatial data sharing policy. The two principle standards that will be used are:

Web Map Service (WMS) - implements the OGC WMS Interface Standard to get "map images" (in formats such as PNG and JPEG) from diverse types of servers that are able to produce such images and serve them via interfaces that implement the WMS standard. A WMS implementation does not return the actual data, but only a raster map image created from the data.

Web Feature Service (WFS) – Servers that implement the OGC Web Feature Service (WFS) interface standard return vector source data (points, lines, and polygons) encoded in the widely used OGC Geography Markup Language (GML) format.

The SSDSP expects that enhancements or additional interoperability standards may be added to these service standards over time.

9.3. Geodetic Reference Frame

Spatial datasets should be made available as vector or raster data using the established National datum. In the absence of such datum the Geographic Coordinate System on the World Geodetic Systems 1984 (WGS84) and/or the Universal Transverse Mercator (UTM) on the WGS84, depending on the zones (Zone 38 South, Zone 39 South and Zone 40) south of the Equator is recommended.

A standard set of transformation parameters between these Datums will be made available by the Survey Department and should be applied consistently to all spatial data.

9.4. Metadata

Metadata is data that describe both the database/dataset organization and the data's fitness for use. Database organization involves physical storage and schema. Fitness for use involves content, ownership, collection and processing methods, lineage, resolution, accuracy, spatial location and extent. Metadata helps people who use spatial data to find the data they need and determine how best to use the data. It also benefits the data producing agencies, because as personnel changes in an organization, undocumented data may lose their value due to little understanding of the contents and uses by the new staff. Moreover, lack of knowledge about other

organization's dataset can lead to duplication of effort. The value of a dataset is therefore dependent on its documentation.

The metadata content shall conform to the ISO 19115 standard and include as a minimum the attributes listed in Appendix 3.

The metadata for all fundamental datasets shall be updated and published whenever the dataset is updated by the owner.

10. Spatial Data Management

All spatial data covered by this policy will be managed in accordance with International best practice.

The Seychelles Spatial Data Sharing Policy promotes a distributed architecture for spatial data management. This will facilitate sharing by owners of fundamental spatial data who wish to provide access from their own data centres.

In the national interest and in order to avoid additional work for owners of fundamental data sets that do not have the capacity or skills to manage such data, the Centre for GIS will, on request, provide services to undertake their hosting and distribution. This service will be subject to agreements on cost sharing.

11. Access and Distribution

11.1. Access within Government

Subject to restrictions on grounds of privacy or national security, all fundamental spatial datasets, owned by public sector organizations shall be made accessible to all Governmental bodies within the established structure. Costs of such sharing shall be waived providing the receiving agency commits to reciprocating by sharing any enhancements or updates with the donor organization in a timely manner and committing to the other provisions of the policy.

11.2. Open Data

The NGSC shall review the fundamental data themes and consider what datasets within these themes shall be made openly accessible to all users (including for commercial use). The benefits of open and free access of Spatial Data to the growth

of a National Economy have been well established through various economic studies, as summarized on the European Data Portal site.

Government data that is agreed to be made open, shall be governed by the appropriate creative commons licensing[1] (see section 12).

11.3. Fee-based Access

Where it is decided that datasets are not open and freely available to all, access on payment of appropriate fees will be considered under the Pricing and Licensing (Section 8). Permission to use such data should be requested from the creator and custodian of the dataset. In the case of Government datasets permission to use such datasets must be sought through the GIS Data Sharing Agreement (Appendix 1).

Access to individual academic/educational users and/or educational establishments, solely for teaching/instructional/research purposes shall be subject to licensing arrangements. The applicable fees may be waived or discounted upon the discretion of the data custodian and/or according to its pricing policy if available.

11.4. Spatial Data Discovery

In order to facilitate metadata discovery of fundamental data for all users, an infrastructure should be made available.

Each organization that own fundamental spatial data shall create and maintain their own metadata and make this available publically.

11.5. Scientific Papers

Any publication of scientific papers or reports making use of fundamental datasets and/or any other spatial data acquired within Seychelles must acknowledge the source of the data and a copy of the publication/report should be handed over, free of charge to the Centre for GIS to aid the building of a national spatial knowledge base.

[1] https://creativecommons.org/licenses/

12. Legal Issues

12.1. Transparency

Seychelles is a member of the Open Government Partnership (OGP) an International body committed to promoting transparency and accountability in Government.

The Seychelles Spatial Data Sharing policy will adopt and implement commitments made to this body by the Seychelles Government.

12.2. Access to Spatial Data

Unless there are specific reasons for not doing so, policy in relation to access to public records that exists in law or regulation for paper records, will be the same for records that are available in digital systems.

12.3. Privacy

In line with Government policy, personal data should not and will not be released, unless there is either consent from affected parties or other legitimate basis for its release

All spatial data covered by Seychelles Spatial Data Sharing Policy must be subject to anonymization or aggregated in a manner that prevents release of personal data prior to its publication.

12.4. Ownership

All datasets produced using governmental resources or which are produced by any third party under any contract for the Government of Seychelles shall be under the ownership of the Government of Seychelles.

For datasets funded by any donor who asserts rights in relation to the same, the Government counterpart should ensure that an agreement forms part of the agreed contract that addresses data sharing concerns.

12.5. Custodianship

A custodian is a recognized body having the responsibility to ensure that a dataset is collected, prepared and maintained according to specifications and priorities

determined by consultation with the user community. The responsibilities of a custodian should be decided and set by the NGSC.

12.6. Copyright

Unless otherwise stated by law, the copyright shall be with the owner of the data

No part of any copyright materials (maps, charts, plans, diagrams, graphs, cross-sections, figures, sketch maps, tables, and photographs) may be reproduced or transmitted in any form or by any means, or stored in a retrieval system of any nature, without the written permission of the copyright holder in advance.

12.7. Liability

Caution must be exercised when users utilize fundamental spatial data covered by this policy. Raw data may have been transcribed from analogue to digital format, or may have been acquired by means of automated measuring techniques. Although such processes are subjected to quality control to ensure reliability where possible, some raw data may have been processed without human intervention and may in consequence contain undetected errors.

Whilst Government organizations creating such data will have taken care to ensure that the data contained within the Dataset(s) are as free from error as is reasonably practical they can no warranties, either express or implied, with respect to the data, their quality, performance, merchantability, or fitness for any particular use or purpose whether made known to the Centre for GIS or otherwise. The owners or their employees, shall not be liable to the Licensee/users of spatial data) for any loss, damage, injury or any other occurrence, including consequential losses of any kind arising from the use of the data.

13. Pricing and Licensing

The Seychelles Spatial Data Sharing Policy on the pricing for spatial data and services provided by the public sector must support the Government’s strategic objective in improved access to information. The high cost of such products and services are seen as an effective barrier to the access to such information for the majority of the people. The aim of such policy must not be to achieve cost recovery from users, but to make

spatial information and services more accessible, affordable, and ultimately more effective and efficient.

In this respect, the purpose of the Seychelles Spatial Data Sharing policy is to have a uniform approach in the public sector on pricing of spatial information and services.

13.1. Digital Pricing Structure

Different pricing structures will be applied to fundamental spatial data and non-fundamental data products. Further spatial data services shall be distinguished as subject to different policy settings.

Fundamental Spatial Data Products

Where such data is not open and freely accessible, such data will not be sold but licensed for a fixed period.

Non-fundamental Spatial Data

The price for non-fundamental spatial data, if any, will be determined by the respective data owners based on any established government pricing policy and/or individual pricing guidelines in the absence of a general policy.

Value added services

Any customized dataset created based on specific requests may be subjected to a fee which will reflect the costs involved for providing such a service. The cost elements involved will include, but may not be limited to, time taken to produce the data and costs of providing the data (printing or otherwise).

13.2. Printed Data

Respective organisations are under no obligation to provide printing services under this policy, however if printing services are to be offered, it is recommended that pricing should be established in a rational manner that is not restrictive to potential customers whilst considering the costs involved for providing such a service.

13.3. Datasets in Raster format

A department may find it necessary to provide a client with a map in jpeg or similar bit-map format either for (1) use in a digital environment e.g. on PowerPoint Presentations

or documents, (2) there is a problem with printing and printed maps cannot be provided. In this circumstance the map producer can decide on their own pricing scheme.

13.4. Licensing

For open spatial data, the policy will adopt a *Creative Commons approach*[1].

For fee-based fundamental spatial data licensing, please refer to Appendix 1 for details of the proposed template license agreement.

13.5. Unlicensed Use

The Centre for GIS, through MLH reserves the right to take appropriate action against unlicensed users or users making use of unauthorized copies of data as described in this document.

14. User Support

The Centre for GIS will provide support to spatial data suppliers, on request, to assist them in conforming to the Seychelles Spatial Data Sharing Policy.

Matters raised with the Centre for GIS raised in through user support that require policy change will be tabled for consideration by the National Geospatial Steering Committee.

APPENDIX 1

Ministry of Lands and Housing

GIS DATA SHARING AGREEMENT

LEGAL AGREEMENT

This Legal Agreement ("Agreement") is a license and is made and entered into by and between the Ministry of Lands and Housing (MLH) acting for and on behalf of the Republic of Seychelles ("*LICENSOR*") and *{Name and credentials}* ("*LICENSEE*").

1. Background

a) The Centre for GIS is mandated by the government to create, store, manipulate and share geospatial data on a digital platform. Its mission is to promote, facilitate and support the application of geospatial technologies and to provide an enterprise GIS framework and information portal (one-stop shop) to a wide range of GIS information, resources and services. It achieves this objectives by providing a centralized, comprehensive and fully integrated nationwide GIS that serves the requirements of all users from public and non-governmental agencies (i.e. GIS data repository) amongst other functions. The Centre for GIS is the body authorized to design and formulates the national policies of the Spatial Data infrastructure (SDI), data standards and the interoperability. Working with its stakeholders, the Centre for GIS provides GIS assistance in terms of GIS implementation and integration.

b) *[Name of LICENSEE]* is a *[describe legal status of entity]* engaged in *[describe main area of operations.]*

…

2. Definitions

As used in this Agreement, the capitalized terms and acronyms have the meaning set out below.

- **Agreement** means this Data Sharing Agreement, including all documents attached or incorporated by reference.
- **Dataset** means any organized collection of data
- **Derivative Works** are works based on or derived from one or more existing works. For the purposes of this document, derivative works include derived data and analytical products, including but not limited to: research papers, analytical

studies, data visualizations, derived indicators, aggregated and/or derived databases, and other outputs (e.g. publications, CDs, mobile device applications, blogs, online data products, etc.) created using the Dataset(s) and Metadata in question.

- **GIS**. Geographic Information System (GIS) software is designed to capture, manage, analyze, and display all forms of geographically referenced information. GIS can show many kinds of data on one map. This enables researchers and other data users to more easily see, analyze, and understand patterns and relationships.
- **Geospatial data** or GIS data or geo-data has explicit geographic positioning information included within it, such as a road network from a GIS, or a geo-referenced satellite image. Geospatial data may include attribute data that describes the features found in the Dataset.
- **Map Projection** is a systematic transformation of the latitudes and longitudes of locations on the surface of a sphere or an ellipsoid into locations on a plane. Map Projections are necessary for creating maps. All Map Projections distort the surface in some fashion. Depending on the purpose of the map, some distortions are acceptable and others are not; therefore, different Map Projections exist in order to preserve some properties of the sphere-like body at the expense of other properties.
- **Metadata** are defined as ‘data about data’. They help understand the meaning of data, or provide useful information about its provenance or licensing status.
- **Raster Data** consist of a matrix of cells (or pixels) organized into rows and columns (or a grid) where each cell contains a value representing information. Types of Raster Data include: satellite imagery, remotely sensed satellite data and others.
- **Shapefiles**. The shapefile format is a popular geospatial vector data format for GIS software. The shapefile format can spatially describe vector features: points, lines and polygons representing, for example, water, wells, rivers, and lakes. Each item usually has attributes that describe it, such as name or temperature.

- **Vector Data** uses the simple geometric objects of points, lines, and areas (polygons) to represent spatial features.
- *[Other Items (OPTIONAL). These could refer to terms specific to the topic(s) for which the dataset(s) are being shared.]*

3. Name and Description of Dataset(s)

Fill in attached ***Data Request Form*** (Appendix 2)

4. Warranties

Although the LICENSOR is making these datasets available to others who may find the datasets of value, the LICENSOR does not warrant, endorse, or recommend the use of these datasets for any given purpose. The LICENSEE assumes the entire risk related to the use of these datasets. The LICENSOR is providing these datasets "as is", and the LICENSOR disclaims any and all warranties, whether expressed or implied, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose. In no event will the LICENSOR, its officers, employees and agents and all contributors be liable to you or to any third party for any direct, indirect, incidental, consequential, special, or exemplary damages or loss of profits resulting from any use or misuse of these datasets.

5. Objectives

[*Please provide the overall, as well as, any specific objectives of the data sharing. Please indicate if the datasets being shared can only be used for this purpose or if it can be used for other objectives consistent with the respective mandates of the Parties, as well as, with Articles 6 and 8 of this Agreement*.]

6. Implementation

(a) **Effectiveness date of this Agreement** This Agreement shall come into force and effect upon signature by both parties on the date set forth here.

(b) **Term of the Agreement**.

Unless modified or terminated as provided below in Article 17 (“Modification and Termination”), Period over which the Agreement is effective, e.g. one year from the signing date, or specific set of start and end dates.

(c) **Data Delivery**:

Data will be provided *[in electronic form, or in files which are in a machine readable format, or in a print medium or other options.]*

(d) **Data Format**:

Geo-spatial Dataset(s) will be provided by LICENSOR in the format stated in the request form (ANNEX).

(e) **Metadata:**

Geo-spatial Dataset(s): Metadata necessary to understand the Geo-spatial Dataset(s) will be provided by the LICENSOR.

[Given below is a suggested list of Metadata that LICENSOR shall provide. It does not purport to be a comprehensive list, but comprises metadata that is intended to help researchers/analysts understand what the data are measuring, and how they have been created.]

A. Title – name by which the Dataset is known
B. Description – brief summary including the purpose for which the Dataset was developed
C. Theme – common use word or phrase used to describe the subject of the Dataset
D. Place – geographic name of the location covered by the Dataset
E. Data presentation format – this refers to the Vector or Raster formats used to represent the Geo-spatial data, including any specific standard file format used
F. Map projection –name of the Map Projection used
G. Bounding Coordinates: a. Western-most coordinate of the limit of coverage expressed in longitude
    a) Eastern-most coordinate of the limit of coverage expressed in longitude

b) Northern-most coordinate of the limit of coverage expressed in latitude
c) Southern-most coordinate of the limit of coverage expressed in latitude

H. Publication year and edition - the year when the Dataset was published or made available for release and the current edition (version)
I. Publisher – name and contact information of organization or individual publishing the Dataset
J. Metadata contact – name, email, telephone of contact information for metadata details
K. Citation – attribution of Dataset credit to organization or individual(s)

7. Intellectual Property

a) The parties recognize the importance of protecting and respecting intellectual property rights. The parties agree on the treatment of Intellectual Property rights in the data shared under this Agreement as given below.
b) This Agreement *does not grant* on the part of either parties the right to use any other materials belonging to, or created by the other, *except* for the Dataset(s) specified in Article 3 (“Name and Description of Dataset”), and Metadata (documentation) specified in Article 6 (“Implementation”) above, *[unless stipulated otherwise in Article 8 (“Data Use and Sharing”) below.]*

8. Data Use and Sharing

8.1. Permitted Use

a) The LICENSEE in signing this Agreement agrees that all digital datasets, delivered by the LICENSOR shall be for the internal use of LICENSEE. Datasets products may be shown but NOT sold, traded, disposed of, transmitted to or otherwise made available to any individual(s), joint-venture(s) or Partner Company or companies excepting its parent company, any wholly-owned subsidiary, or affiliate.

If any outside consultants are engaged to work on this data, they must be made aware of this agreement and requested to initial one copy.

b) Datasets obtained, whether in digital format, by scanning of hardcopy maps or any other reproduction processes, are licensed for use by the LICENSEE only for the above mentioned project. If the duration of the project exceeds one year special permission must be obtained from the LICENSOR.

c) Marketing, distribution and/or selling of standard or enhanced digital products by the LICENSEE may only be undertaken with the written permission of the LICENSOR.

8.2. Sharing of Derivative Works

a) The LICENSEE agrees that any derivative maps, interpretation and/or reports made from the original datasets will be only for internal use of the LICENSEE or its affiliates. These second generation products may not, except as detailed under point 8.2(b), be sold, traded, disposed of, transmitted to or otherwise made available to third parties who have not obtained the original datasets from the LICENSOR.

b) The LICENSEE undertakes to keep the LICENSOR informed on any reprocessing of digital datasets and agrees to provide the LICENSOR with one copy of any reports, maps and enhancements of these datasets within 1 month of completion thereof.

9. Citations and Acknowledgement

The LICENSOR retains all copyrights to digital data and maps provided. Presentation of these data at conferences or in research publications must acknowledge the copyright holder.

10. Limits to Agreement

a) Nothing in this Agreement shall be construed as creating a joint venture, an agency relationship, or a legal partnership between the LICENSOR and LICENSEE.
b) Nothing in this Agreement is intended to be, or should be construed as a waiver of the privileges and immunities of either Party or its officers and employees, which privileges and immunities are hereby specifically reserved.
c) No relationship exclusive of a third party or parties shall be established between the Parties, whether under this Agreement generally or with respect to any specific activities or projects undertaken pursuant thereto, unless explicitly agreed to by the Parties under a separate agreement. Neither Party is restricted in any way from engaging a third party or parties to pursue independently of the other Party the objectives described in this Agreement except that such engagement with a third party or parties shall not conflict or otherwise unduly interfere with the implementation of this Agreement or any activities or projects undertaken pursuant thereto.

11. Indemnification

Each party to this Agreement shall be responsible for any and all acts and omissions of its own staff, employees, officers, agents and sub-contractors. Each party shall furthermore defend and hold harmless the other party from any and all claims, damages, and liability of any kind arising from any act or omission of its own staff, employees, officers, agents, and sub-contractors.

12. Modification and Termination

a) This Agreement may be terminated by either parties upon 30 days' written notice to the other party. Either party shall promptly notify the other in writing of the termination and the reasons for termination, together with the effective date of termination.
b) Upon termination of this Agreement the LICENSEE shall immediately discontinue use of the Datasets and either return all copies of the Datasets to LICENSOR, or destroy all copies and provide LICENSOR with written notification of destruction within 30 days of the date of termination.

c) No addition to or modification of any provision of the Agreement shall be binding unless in writing signed by both parties.

13. Miscellaneous

a) The section headings in this Agreement are for convenience only and are not intended, and shall not be construed, to alter, limit, or enlarge in any way the scope or meaning of the language contained in this Agreement.
b) The Agreement supersedes all prior agreements and understandings between the parties relating to the Datasets and constitutes the entire agreement between the parties.
c) The person signing this Agreement on behalf of each Party hereby represents and warrants to the other Party that he or she has the requisite legal power and authority to execute this Agreement on behalf of the Party and bind the Party to the obligations herein.

14. Signing and Compliance

In witness whereof, the Parties have caused this Agreement to become effective as of the day and date written below or as specified in Article 6 (“Implementation”) above.

MINISTRY OF LANDS AND HOUSING (LICENSOR)	**(LICENSEE)**
Name: _____	Name: _____
Title: _____	Title: _____
Agency: _____	Agency: _____
_____	_____
_____	_____
_____	_____
Signature: _____	Signature: _____
Date: _____	Date: _____

APPENDIX 2

GIS DATA REQUEST FORM

This form must be filled out completely, signed and dated to process your order. *Please return the fully completed form to the Centre for GIS.*

Procedure:

- To request data please fill out, sign and return the order form.
- Sign the data use disclaimer agreement on the second page.
- Email or send the completed request form and signed data use disclaimer agreement to the above.

Organization:	_____	**Date:**	_____
Requested by:	_____	**Project:**	_____
Address:	_____	**Phone:**	_____
	_____	**Email:**	_____
	_____		_____
	_____		_____
	_____		_____

Geographical extent:

_____
_____
_____
_____
_____

Name and Description of Dataset(s) Requesting:

_____
_____
_____
_____
_____

Purpose of Request (*Brief Description*):

_____
_____
_____

_____
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_____
_____

Data Format:

Data delivery will be in the format as prescribed below in WGS 84, UTM Zone 38S/39S/40S. An additional fee will be charged for any reprojection. Only datasets maintained and developed by the Centre for GIS will be released under this Agreement.

☐ Shapefile ☐ Geodatabase ☐ Paper Map ☐ Data Table

☐ Other _____

Disclaimer: *The GIS data provided by the Centre for GIS from the Ministry of Lands and Housing (MLH) has been compiled for information purposes only and is not "live" data. Utmost care is being taken to ensure that the data is free from errors as is reasonably practical but the Ministry makes no warranties, either expressed or implied, with respect to the data, their quality, performance, merchantability, or fitness for any particular use or purpose. The Ministry, shall not be liable for any loss, damage, injury or any other occurrence, including consequential losses of any kind arising from the use of the data. Users are notified that the data layers do not take the place of licensed surveys or other primary source documentation. MAPS DERIVED FROM THE WEBGIS ARE NOT TO BE USED AS OFFICIAL DOCUMENTS AND IN ANY COURT OF LAW. By using the WebGIS you understand and agree to these terms.*

Signature: _____ **Date:** _____

APPENDIX 3

METADATA FORMAT

Minimum set of fields to compile metadata for a fundamental spatial dataset (elements extracted from ISO 19115)

Red fields are mandatory, blue fields are strongly recommended and black fields are optional

Requirements	Description
Title	Name by which the cited resource is known
Date	Date of creation or publication
Presentation form	Mode in which the resource is represented i.e. image digital, ...
Language	Language(s) used within the dataset
Abstract	Brief narrative summary of the content of the resource(s)
Supplemental Information	Any other descriptive information about the dataset
Purpose	Summary of the intentions with which the resource(s) was developed
Status	Status of the resource(s) i.e. ongoing, completed...
Topic category	Main theme(s) of the dataset. The list of topic categories is provided by the ISO standard i.e. imagery

Descriptive keywords	Provides category keywords, their type, and reference source: • Discipline • Place keywords • Stratum • Temporal • Theme
Spatial representation type	Method used to spatially represent geographic information i.e. vector, grid, text table...
Equivalent Scale	Level of detail expressed as the scale of a comparable hardcopy map or chart
Geographic box	Minimum bounding rectangle within which data is available
Access constraints	Access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the resource
Use constraints	Constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations or warnings on using the resource
Maintenance and update frequency	Frequency with which changes and additions are made to the resource after the initial resource is completed
Point of contact	Identification of, and means of communication with, person(s) and organizations(s) associated with the resource(s)
Distribution info	Provides information about the distributor of and options for obtaining the resource(s)
Spatial representation info	Digital representation of spatial information in the dataset
Vector spatial representation	Information about the vector spatial objects in the dataset

	• **topology level** (code which identifies the degree of complexity of the spatial relationships) • **geometric object type** (name of point and vector spatial objects used to locate zero-, one-and two-dimensional spatial locations in the dataset) • **geometric object count** (total number of the point or vector object type occurring in the dataset)
Grid spatial representation	Information about grid spatial objects in the dataset: • **number of dimensions** (number of independent spatial-temporal axes) • **dimension name** (name of the axis i.e. row, column) • **dimension size** (number of elements along the axis) • **resolution value** (degree of detail in the grid dataset) • **cell geometry** (identification of grid data as point or cell) • **Transformation parameter availability** (indication of whether or not parameters for transformation exists)
Reference system	Information about the reference system.
Data quality info	Provides overall assessment of quality of a resource(s)
Lineage	Non-quantitative quality information about the lineage of the data specified by the scope. Mandatory if report not provided
Statement	General explanation of the data producer's knowledge about the lineage of a dataset
Report	Quantitative quality information for the data specified by the scope. ***Mandatory if lineage not provided***

Metadata Date stamp	date that the metadata was created
Metadata language	language used for documenting metadata
Metadata standard name	name of the metadata standard (including profile name) used (i.e. ISO 19915 FDIS)
Metadata author	party responsible for the metadata information

APPENDIX 4

Categories and Keywords

Isotopic Category	Main Topic	Examples	Keywords
Base Maps	Base Maps, Scanned Maps, and Charts		Base Map
Biota	Biologic and Ecologic Information Flora and/or fauna in natural environment	wildlife, vegetation, biological sciences, ecology, wilderness, sea life, wetlands, habitat	
Boundaries	Administrative Legal land descriptions and Political Boundaries	political and administrative boundaries	Administrative boundaries,
Climatology Meteorology Atmosphere	cloud cover, weather, climate, atmospheric conditions, climate change, precipitation		NDVI, Drought, Floods
Earth Cover	Earth Surface Characteristics and Land Cover		Land Cover
Economy	Business and Economic Information, Economic activities, conditions and employment	production, labour, revenue, commerce, industry, tourism and ecotourism, forestry, fisheries, commercial or subsistence hunting,	

		exploration and exploitation of resources such as minerals, oil and gas	
Elevation	Elevation and Derived Products, Height above or below sea level	altitude, bathymetry, digital elevation models, slope, derived products	Digital Elevation Model
Environment	Environmental Monitoring and Modelling, Environmental resources, protection and conservation	environmental pollution, waste storage and treatment, environmental impact assessment, monitoring environmental risk, nature reserves, landscape	
Farming	Agriculture and Farming Rearing of animals and/or cultivation of plants	agriculture, irrigation, aquaculture, plantations, herding, pests and diseases affecting crops and livestock	Agriculture, Crop Production, Livestock
Geoscientific Information	Geologic and Geophysical Information, Information pertaining to earth sciences	geophysical features and processes, geology, minerals, sciences dealing with the composition, structure and origin of the earth's rocks, risks of earthquakes, volcanic activity, landslides, gravity information, soils,	

		permafrost, hydrogeology, erosion	
Health	Human Health and Health, health services, human ecology, and Disease safety	disease and illness, factors affecting health, hygiene, substance abuse, mental and physical health, health services	Malnutrition, Wasting, Stunting, Underweight, Food Deficit, Crop Disease, Livestock Disease,
Imagery	Images and Photographs		
Imagery Base Maps Earth Cover	Base maps	land cover, topographic maps, imagery, unclassified images, annotations	
Inland Waters	Inland Water Resources and Characteristics, Inland water features, drainage systems and their characteristics	rivers and glaciers, salt lakes, water utilisation plans, dams, currents, floods, water quality, hydrographic charts	Rivers,
Intelligence Military	Military bases, structures, activities	barracks, training grounds, military transportation, information collection	
Location	Geodetic Networks Positional information and services and Control Points	addresses, geodetic networks, control points, postal zones and services, place names	Cartography

Oceans	Ocean and Estuarine Resources and Characteristics(excluding inland waters), Features and characteristics of salt water bodies	tides, tidal waves, coastal information, reefs	
Planning Cadastre	Cadastral and Legal Land Descriptions. Information used for appropriate actions for future use of the land	land use maps, zoning maps, cadastral surveys, land ownership	
Recreation	Tourism and Recreation		
Society	Society and Cultural and Demographic Information, Characteristics of society and cultures	Settlements, anthropology, archaeology, education, traditional beliefs, manners and customs, demographic data, recreational areas and activities, social impact assessments, crime and justice, census information	Vulnerability, Early Warning, Emergency, IDPS, Refugees, Population, Poverty, Food Security, Regional Bureaux, WFP Facilities, School feeding
Structure	Facilities, Man-made construction, Buildings and Structures	buildings, museums, churches, factories, housing, monuments, shops, towers	
Transportation	Transportation Means and aids for conveying	roads, airports/airstrips, shipping routes, tunnels,	Infrastructure, COMPAS, Food

	persons and/or goods, Networks and Models	nautical charts, vehicle or vessel location, aeronautical charts, railways	Aid, Food Beneficiaries, Railways, Roads, Shipments
Utilities Communication	Utility Distribution Networks, Energy, water and waste systems and communications infrastructure and services	hydroelectricity, geothermal, solar and nuclear sources of energy, water purification and distribution, sewage collection and disposal, electricity and gas distribution, data communication, telecommunication, radio, communication networks	