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General Notice

NAMIBIA STATISTICS AGENCY

No. 103

2015

NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI) POLICY

Many parties, individuals and organisations, are involved in the production and use of spatial data in Namibia. The main producers of spatial data are the various line Ministries in Government. Their activities related to spatial data include data collection, processing, integration, storage, exchange, access and dissemination. The private sector and Non-Government Organisations also produce spatial data. The main users of spatial data and related services are Government, utility companies, public services, private sector commercial and professional users, research institutions, international organisations, the donor community and the general public. An important characteristic of spatial data is that many serve a variety of purposes and the same datasets are therefore useful for many data users.

Spatial data and its use have changed dramatically over the past few decades. Not so long ago, spatial data was confined to paper maps and diagrams. With the advance of Geographic Information Systems, it became possible to link all data with a spatial component in large (geo) spatial databases. Today spatial data is digital with the location element linked to an increasingly larger set of attributes. For planning and monitoring purposes it is important to know where something is, its current status, requirements and other attributes. With these important technological developments and the high cost of producing spatial data the need for the effective and efficient management of spatial data from production to use has emerged.

The Namibia Statistics Agency (NSA) collects and compiles a wide range of data for its ongoing work in support of monitoring national development and to inform development planning and decision making in the country. Under the new Statistics Act (Statistics Act, 2011, No. 9 of 2011) and Namibia's Fourth National Development Plan, the NSA, together with the Ministry of Lands and Resettlement are charged to take the lead in developing a National Spatial Data Infrastructure (NSDI) Policy to improve the production, sharing and use of spatial data. The NSDI Policy contained in this document will benefit Namibia in a number of ways. It will

- clarify the value placed on spatial data in Namibia;
- link the impact of spatial data sharing to the ultimate utilisation of spatial data;
- establish guiding principles and strategies to enhance quality and accessibility;
- avoid duplication of efforts and wasteful use of limited resources;
- increase the frequency of updating where this is required to maximise usefulness; and
- ensure that users including the general public are aware of the availability of spatial information.

This new Policy represents a major step forward for our young democracy. It is our hope that this Policy will translate into the improved utilisation of spatial data in policy development, decision-making and research.

T. K. ALWEENDO
DIRECTOR-GENERAL
NATIONAL PLANNING COMMISSION

Windhoek, 24 February 2015

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ABBREVIATIONS

ICT	Information and Communications Technology
ISO	International Organisation for Standardization
NSA	Namibia Statistics Agency
NSDI	National Spatial Data Infrastructure
NSDI Committee	Committee for Spatial Data
SADC	Southern Africa Development Community
SDI	Spatial Data Infrastructure
Statistics Act (or the Act)	Statistics Act, 2011, (Act No. 9 of 2011)

2 INTRODUCTION

The NSDI Policy has been developed over a number of years through (i) an inclusive consultative process including in particular the NSA and its predecessor CBS, the Ministry of Lands and Resettlement, other producers, and the wide range of users of spatial data, and (ii) in-depth research into national, regional and international trends and best practices. Expert inputs have been provided by staff of the former Central Bureau of Statistics, staff of the NSA, and other national and international contributors including the Luxembourg Agency for Development Coordination and external consultants. These processes afforded opportunities to stakeholders to deliberate on and contribute to the Policy.

The Policy is aligned to regional and international commitments such as United Nations and SADC to which Namibia is a participant and/or signatory. This Policy, which has been under development since 2009, considered the existing legislation and also what was done in the past such as the draft NSDI Policy for Namibia that was developed in 2003.

The Policy applies to the government institutions and government spatial data sets. Private sector institutions which produce spatial datasets are encouraged to follow the relevant provisions of the Policy.

3 PURPOSE OF THE POLICY

The purpose of this National Spatial Data Infrastructure (NSDI) Policy is to provide guidance for improving the initiation, collection, processing, integration, storage, distribution, awareness of, access to, and utilisation of spatial data and services, compatible with the stated objectives of the NSDI as set out in the Statistics Act, 2011,(No. 9 of 2011). This Policy is complemented by relevant principles and policies set out in the Statistics Policy for Namibia, and should be read in conjunction with that Policy.

Spatial data is the information that identifies the geographic location and characteristics of natural or constructed features and boundaries. Spatial data involves a wide network of spatial data producers/custodians¹ and users including government institutions, the private sector, Non-Governmental Organizations, educational and research institutions, community-based organizations and the general public.

The NSDI is the set of policies, standards and procedures under which organisations and technologies interact to foster more efficient production, management, access and use of spatial data in a country. The NSDI consists of organisations and individuals who generate and/or use spatial data, the actual spatial data, and the technologies, facilities and services that facilitate collection, production, transfer and use of spatial data. The NSDI includes the communication channels and partnerships among the stakeholders, and the organisational agreements needed to coordinate and administer it on a local, regional, national and trans-national scale.

NSDI hosts spatial data and attributes with sufficient documentation about the data (i.e. metadata). In addition, it is a means to discover, visualise, and evaluate the data and a method to provide access to the data for its use. NSDI aims to ensure that users of spatial data will be able to acquire good quality and consistent datasets to meet their requirements, even though the spatial data are collected and maintained by different entities.

Spatial data is the key to the planning and sustainable management and development of Namibia's natural resources, the development of the economic and social infrastructure, the provision of community services and the conduct of effective Government administration. Spatial data also plays a significant role in local, regional, and national Government, and broader regional integration and international cooperation. Spatial data is critical to the development and planning of various sectors of the economy such as mining, agriculture, transport, defence, tourism, education, health, utilities (include water, electricity and communication technologies), design and construction of roads, railways, airports, waterways, industrial and housing, farming, other environmental and social projects (including the monitoring of desertification, erosion, flooding, pollution, and soil degradation). Furthermore, the effective delimitation and mapping of the country's boundaries, local and regional Government areas is a fundamental requirement supported by spatial data.

4 NSDI CONTEXT AND OBJECTIVES FOR NAMIBIA

The Government's overall economic and social vision is to transform Namibia into a knowledge-based, highly competitive, industrialised and eco-friendly nation, with sustainable economic growth and high quality of life by 2030. This vision is supported by the Statistics Act that establishes the NSDI as the national technical and institutional framework to facilitate the capture, management, maintenance, integration, distribution and use of spatial data (Statistics Act 47(1)). These data are basic to design, implement and monitor development plans that will support attaining Namibia's vision. The Act assigned the Statistician-General of the National Statistics Agency (NSA) to administer the NSDI. (Statistics Act 47(4).

The Statistics Act states the following objectives for NSDI (Statistics Act 47 (2)):

- facilitate the capture of spatial data through cooperation between government bodies and other organs of state;

¹ Producer/custodian: a producer is the institution (government or private) that has responsibility to develop, compile, maintain, disseminate and manage a spatial dataset(s) generally including the right, to determine the condition for use, accessibility and distribution of the data. The producer may contract out some aspects of the process but remains the producer. The producer is typically designated as the custodian of spatial datasets it produces; it is also possible for another institution than the producer to be so designated.

- promote effective management and maintenance of spatial data;
- promote the use and sharing of spatial data in support of spatial planning, socio-economic development and related activities;
- create an environment which facilitates coordination and cooperation among stakeholders regarding access to spatial data;
- eliminate duplication in the capturing of spatial data; and
- facilitate the protection of copyright of the state in works relating to spatial data.

The implementation of the NSDI Policy aims at achieving the above stated objectives.

5 APPLICABILITY AND SCOPE

This Policy guides spatial data activities of public, private and civil society organisations in Namibia at national, regional and local levels.

The Policy applies to government bodies producing spatial datasets. Private sector institutions which produce spatial datasets are encouraged to follow the relevant provisions of the Policy. Private sector institutions can benefit from some of the provisions such as including their data in the data and metadata catalogue and advance release calendar alongside the government datasets, and other provisions. Private sector institutions can contribute to the purposes of the NSDI by complying with provisions on coordination, standards, metadata, quality, custodianship and other provisions. Private sector institutions may subscribe to the Policy, comply with its requirements, and enjoy its benefits.

The Policy is made up of broad, high-level policy statements and in many cases identifies specific more detailed components of the policy statements covering the entire process from planning to utilization of spatial data and services.

The Policy provides the framework within which the strategic plan for development of the NSDI and sectoral spatial data plans may be prepared.

6 EFFECTIVE DATE

This Policy becomes effective when endorsed by the Committee for Spatial Data (see Section 6 below), (referred to as the NSDI Committee for the purposes of this Policy), and by the Board of the NSA, tabled in parliament and issued by the Minister of Statistics

7 THE COMMITTEE FOR SPATIAL DATA

The Statistics Act provides for the NSDI Committee to be established and provides that, inter alia, the Statistician-General and the Surveyor-General are members of the NSDI Committee by virtue of their offices with the Surveyor-General being the chairperson of the NSDI Committee. The Act furthermore details the process and conditions of appointment of members of the NSDI Committee (Statistics Act (48)).

The Act provides that the NSDI Committee will function in accordance with the relevant provisions of the Statistics Act. The NSDI Committee must advise the Minister and the Agency on:

- (a) matters referred to the NSDI Committee by the Minister of Statistics or the Statistician-General;

- (b) any matter regarding the capture, management, maintenance, integration, distribution and use of spatial data;
 - (c) any matter which the NSDI Committee considers necessary or expedient for achieving the objectives of the NSDI (Statistics Act 49 (1)):
- (2) The NSDI Committee must -
- (a) Facilitate, promote and safeguard an environment for the efficient collection, management, distribution and utilization of spatial data;
 - (b) promote awareness of its activities, including dissemination of information on the importance of spatial data for effective governance, planning and decision making; and
 - (c) be consulted before any spatial data is captured unless a national emergency makes such prior consultation impossible or impractical (Statistics Act 49 (2)).

The Act further provides that the NSDI Committee must be consulted by the NSA before the NSA makes any standards relating to the NSDI as contemplated in section 36(1)(b) of the Statistics Act, or before it formulates the national spatial data infrastructure policy referred to in section 7(2)(a)(ii) of the Statistics Act) in conjunction with Statistics Act 49(3).

8 NSDI SECRETARIAT

An organizational unit titled the NSDI Secretariat, will be established and appropriately staffed as an integral part of the NSA, to assist the Statistician-General to implement and administer the NSDI and provide secretarial services (technical and administrative functions) to support the NSDI Committee in its work.

The NSDI Secretariat will:

- (a) provide information about current and planned spatial data and metadata and research on spatial data;
- (b) provide an access portal to spatial data and metadata. In so doing, it will provide users with directions/links to all spatial data and related metadata held by custodians (although metadata and some data may be made available in the first instance via a database developed and held by the NSDI Secretariat). To be modified It shall be the responsibility of the data custodian to keep data and metadata up to date;
- (c) establish a central helpdesk to assist NSDI users with general queries and problems related to spatial data.

9 CUSTODIANS OF SPATIAL DATASETS

A custodian will be designated for each spatial dataset by the Statistician-General in consultation with the producer and upon the advice of the NSDI Committee, unless a custodian is already recognized by law. The custodianship will not be unreasonably withheld by those producers not recognized by law; the responsibilities and rights of a custodian, (consistent with footnote 1) will include:

- development of the dataset;
- determining methods of data capture, quality control and assurance;

- complying with standards, legislation, policies and guidelines;
- data content and formats;
- archiving, storage and security;
- maintenance and updates of data and metadata;
- consulting with users about their needs and striving to meet those needs;
- dissemination of data including setting access conditions and pricing;
- notifications about the data and metadata to the NSDI Secretariat; and
- Serving and protecting the interests of the owner of the dataset (if not the custodian).

10 TYPOLOGY OF SPATIAL DATASETS FOR THIS POLICY

For the purposes of the NSDI Policy in Namibia spatial data are separated into two types, fundamental datasets and thematic datasets.

10.1 FUNDAMENTAL DATASETS

Fundamental datasets are spatial datasets that typically have national coverage, and are widely needed, for a variety of purposes, by many users. They are typically produced and funded by government (or donors) and are considered public goods. The following data sets are proposed as fundamental datasets in Namibia, subject to confirmation by the NSDI Committee and the NSA Board:

- geodetic control
- digital imagery
- geographical names
- administrative boundaries
- land parcel/cadastral boundaries
- transportation
- hydrology
- land cover/vegetation/food security
- elevation
- utilities (power, telecommunications, water supply, sewerage)
- geo-demographic data/population/settlement
- geology (Ministry of Mines to specify the data)
- climate
- education, health facilities, social services

- Business infrastructure???

This list can be revised depends on the need.

10.2 THEMATIC DATASETS

Thematic datasets are all spatial data sets other than those designated as fundamental; they may have national or less than national coverage, may be widely needed, by many users or compiled for specialised purposes with few users or for specific tasks; they may be funded by government (or donors) and considered public goods, or may be funded by the private sector and be considered private goods.

11 THE POLICY STATEMENT

The Policy statements are set out below according to main organizational and operational headings.

12 GENERAL POLICIES FOR NSDI

12.1 CO-ORDINATION

Production of spatial data and development and operation of the NSDI shall be carried out in an inclusive, cooperative and collaborative manner under the current policy and legal frameworks, under the leadership of the NSA.

This policy has the following components:

- (a) ready exchange of spatial data among government departments;
- (b) integrating local and regional government, as both producers and users of spatial data, into the cooperative process;
- (c) the NSDI Secretariat developing, publishing, and keeping up to date (i) a catalogue (which may be an electronic catalogue (Statistics Act 47(3)) of all existing spatial data and metadata and planned spatial data collection and research initiatives; and (ii) a catalogue of publications related to spatial data and other information available, in a wide range of distribution media; the Secretariat using all available sources of information to build and maintain the catalogues up-to-date; and encouraging custodians and other stakeholders to provide information for these catalogues;
- (d) an institution commencing a new spatial data collection only after confirmation has been obtained from the NSDI Secretariat that the dataset proposed to be collected does not exist; (propose time lag between application and response)
- (e) an institution producing a new spatial dataset advising the NSDI Secretariat of its production, and a custodian of an existing dataset updating that dataset and informing the NSDI Secretariat of the details of the update;
- (f) the producer of a spatial dataset advising the NSDI Secretariat whether a dataset is available for public access or for limited access, the reasons for any limitation, and procedures for ascertaining conditions under which the available limited access may be obtained;
- (g) the NSDI Secretariat indicating to custodians in respect of the datasets for which they are responsible if those datasets need to be completed or updated; and

- (h) an institution discontinuing any spatial data collection being carried out for statistical purposes if the need for the collection is deemed to be no longer sufficient to justify the collection (Statistics Act 7(2)9b)(vii), and advising the NSDI Secretariat of the discontinuance.

12.2 STANDARDS

Standards relating to the NSDI shall be established, relating to data, metadata, processes and other aspects of NSDI, according to, but not limited to, Schedule 1 (attached); they shall be based on proposals from the NSDI Committee taking account of available regional and international best practices.

This policy has the following components:

- (a) adopting the International Organization for Standardization (ISO) standardisation principles on geographic information and geomatics as embodied in the ISO TC/211 suite of standards;
- (b) the Statistician-General establishing the standards, by notice in the Gazette, after consultation with the NSDI Committee (Statistics Act 36 (1) and 49(3)); and
- (c) all custodians producing and disseminating spatial datasets in accordance with the standards set.

12.3 METADATA

Every spatial dataset shall be accompanied by metadata which shall describe the characteristics of the dataset and which shall conform to the prescribed standard.

This policy has the following components:

- (a) the minimum requirements for metadata content comprising as follows:
- data quality (positional accuracy, attribute accuracy, temporal accuracy, lineage, completeness and logical consistency including geographic coverage);
 - spatial data infrastructure (SDI) organisation and spatial reference (coordinate system, datum, map projection);
 - identification information (name/title of data, custodian / owner/point-of-contact);
 - entity / attribute information (formats, type, measurement units);
 - distribution information (distributor, format, access protocol, procedure); and
 - data abstract (describe this); dataset reference date; metadata date; language of database and metadata; dataset topic category;
- (b) the metadata of any spatial dataset and any updates to the metadata being provided to the NSDI Secretariat;
- (c) a conformance certificate being issued by the NSDI Secretariat to every spatial data custodian that provides metadata for its spatial data holdings in accordance with the national standard; and

- (d) the NSDI Secretariat presenting the metadata in a catalogue, as provided for under 11.1 (c) Coordination above, conforming to the adopted metadata standards.

12.4 OBJECTIVITY

Spatial data custodians shall function with professional independence and present all data and information objectively to maintain public confidence and trust in public spatial data.

The Government will ensure that spatial data custodians remain independent of political and institutional influences.

12.5 TRANSPARENCY

Transparency of practices and procedures used in compiling, processing and disseminating spatial data shall be ensured by all custodians of spatial data.

This policy has the component of early access to spatial data being allowed to key Government officials in exceptional circumstances; the Minister responsible for NSDI determining the merit of exceptional circumstances on a case by case basis; the entire process being transparent and the fact that an exception has occurred and the reason for it being documented and published when the data is released to the public.

12.6 PENALTIES FOR INTERFERENCE

Penalties provided for under the Statistics Act (7(5) and (6)), shall be enforced, when considered appropriate, against persons who interfere with the Statistician-General in connection with the capture, management, maintenance, integration, distribution and use of spatial data collected for statistical purposes.

12.7 INFORMATION AND COMMUNICATIONS TECHNOLOGY

The NSA, as administrator of the NSDI, shall promote with government the need for a robust and supportive information and communications technology (ICT) infrastructure, and web connectivity which will support the technology needs of spatial data production, transfer and use.

The aspects considered in this area are: _

- (a) custodians of spatial datasets adopting compatible network protocols and universally stable and portable operating system that allows flexible networking and running of many application programs;
- (b) Free/Libre Open Source Software (FLOSS) being used wherever appropriate in the NSDI, consistent with general government policy in Namibia; and
- (c) ICT systems for use with spatial data supporting a selection of commonly used Graphical User Interfaces with flexibility to be upgraded in line with the operating system.

13 OPERATIONAL POLICIES

13.1 REGULAR UPDATE OF FUNDAMENTAL AND THEMATIC DATASETS

The NSDI Secretariat shall ensure that the list of fundamental datasets is updated periodically in consultation with the NSDI Committee in the light of national needs surveys, and published;

the custodian of each fundamental dataset shall update the dataset on a continuous basis but not later than ten years after production, unless it can be demonstrated that a dataset is stable and does not need revision.

The custodian of each thematic dataset shall update the dataset on a regular basis; the custodian of a thematic dataset which uses a fundamental dataset as base data shall only update the thematic spatial data.

13.2 DATA QUALITY

Spatial data custodians shall produce relevant, accurate and reliable spatial data, according to the standards set, that will meet needs for development, planning, decision making and monitoring and evaluation in the public and private sectors.

This policy has the following components_

- (a) Data sets that meet agreed upon quality standards will be certified while users will be notified when quality levels of a spatial dataset are deemed as not meeting the standards set; _
- (b) custodians documenting detected errors and speedily implementing and disseminating the corrections / revisions to users; and
- (c) the Statistician-General, at the request of the NSDI Committee or the Minister, or at his or her own instance where he considers it necessary or appropriate,
 - (i) reviewing and commenting on the collection, production, analysis, documentation, storage, dissemination, interpretation and use of spatial data of any government body; and
 - (ii) after consultation with the head of the government body referred to in paragraph (i), publishing any such spatial data and his or her comments thereon as the Statistician-General considers necessary or appropriate. (Statistics Act 35(10)(a)and (b)).

13.3 TIMELINESS

Spatial data shall be disseminated as soon as the final data is ready in accordance with an Advance Release Calendar indicating the planned date when spatial datasets are to become available and accessible; this Calendar shall be compiled and published by the NSDI Secretariat.

13.4 ACCESSIBILITY

Spatial data custodians shall make their data and metadata available for public access except in cases where the data are sensitive or privileged²

This policy has the following components:

- (a) custodians being responsible for the dissemination of their spatial data;
- (b) custodians making spatial data available according to the nationally adopted standard file formats;

² **Privileged data** are data with specific user restrictions which could be based on professional affiliation and/ or organisational hierarchy. Such data may not be subject to usual rules (especially to that of disclosure) because of particular circumstances
Sensitive data include data protected by the State or any other organisation

- (c) custodians including dissemination and access aspects in the planning and design of the spatial data to be produced; and
- (d) custodians formulating an access to information policy, setting out, inter alia, (i) the methods and procedures used to capture, manage, maintain and integrate spatial data; (ii) an inventory of any spatial data held (Statistics Act 46(2)) and (iii) conditions and procedures under which access to privileged or sensitive data may be allowed.
- (e) access to information policies being compatible with the established standard.
- (f) access to information not unreasonably withheld

13.5 DISSEMINATION

Spatial data custodians shall publish and distribute the data and metadata via publishing media that make them easy to find, easy to understand and easy to use; the process for accessing data should be simple and speedy and within the current technical and financial limits.

Components of dissemination are:

- (a) electronic dissemination of spatial data via the internet being the preferred dissemination channel NSDI Website will also be used to disseminate spatial data;
- (b) traditional paper based publications and distribution via other electronic media continuing to be widely available to all users as needed; and
- (c) all spatial data being produced in English as Namibia's official language with translations into other local languages being undertaken on a needs basis or as identified by the NSDI Committee.

13.6 Pricing

All current and historical fundamental spatial datasets and metadata shall be made available by the custodians, in existing formats, at no production cost, other than a fee which may be charged to cover the costs of meeting a request, the charging of which shall be at the option of the custodian; other spatial datasets shall be made available according to a pricing policy aimed at improving the accessibility and affordability of spatial data and promoting its use, such policy to be developed by the NSDI Committee

This policy has the following components:

- (a) a charge being made when custodians provide contracted services to develop spatial data for clients or provide value-added services applied to existing spatial data held by the custodian;
- (b) the NSDI Committee developing the pricing policy for spatial data and making revisions as deemed necessary;
- (c) prices being consistent for all spatial data users;
- (d) pricing policy and prices of spatial data being published in the catalogue of spatial data and metadata; and
- (e) all custodians of government spatial data encouraging the broad use of spatial data by free distribution of spatial data in existing formats to:

- selected institutions on the basis of agreement and under defined conditions;

13.7 STORING AND ARCHIVING

Spatial data custodians shall establish a backup storage policy to prevent loss of or damage to spatial data and metadata; all historical spatial data and its metadata shall be archived, after updating, according to accepted archiving practices and relevant Namibian laws.

13.8 INTERNAL DISSEMINATION WITHIN GOVERNMENT

All Government employees shall be allowed secured access to all non-privileged and non-sensitive Government-produced spatial data for their legitimate work purposes.

13.9 USER SATISFACTION

Spatial data custodians shall follow a user-centric strategy, striving to deliver what is needed by users in both the public and private sectors. The NSDI Secretariat shall conduct regular surveys to determine NSDI user needs and satisfaction.

This policy has the component of users being encouraged to report any deficiencies observed in a spatial dataset to NSDI Secretariat and the custodian of the dataset.

14 COPYRIGHT AND INTELLECTUAL PROPERTY RIGHTS

Spatial data custodians shall take all necessary legal steps to protect the copyright of the State relating to spatial data for which they are responsible.

This policy has the following components: _

- (a) government retaining ownership of a spatial dataset produced by another entity under commission from the government and such dataset being supplied to Government in full and in digital form;
- (b) government specifying in a licensing agreement the criteria exchanging fundamental dataset under which a user may supply to a third party the spatial data sourced from a government custodian;
- (c) government entering into license agreements with entities for the commercial use of, value-addition to and sale of, government spatial datasets, while retaining the right to purchase the value-added product at cost price;
- (d) government retaining full ownership of the spatial database and developed software under contracts where the government commissions an entity to develop a spatial database or releases spatial data upon which software development may be conducted by that entity; and
- (e) government ensuring that any purchase of a spatial dataset from any provider is deemed to be a purchase on behalf of the government as a whole and being available to all ministries with no additional payments to the provider.

15 CONFIDENTIALITY OF DATA

spatial data custodians shall promote a culture of confidentiality among their staff, shall maintain the privacy of data provided through questionnaires for census and other statistical data collections as mentioned in the Act (individuals, households, government bodies, undertakings including enterprises, or any other organizations, and other respondents during

statistical data collections), shall maintain the confidentiality of the information they provide, shall use the collected information only for the purposes for which the data collection was undertaken, and shall ensure the physical protection and security of collected data.

This policy has the following components:

- (a) the general policy not applying to information already published or available on a statistical database accessible to the public or for whose publication or dissemination the data provider gave written permission” (Statistics Act 44 (3) (a) and (b)); and
- (b) custodians implementing appropriate safeguard mechanisms that are part of the protection framework before any statistical spatial data is disseminated to the public.
- (c) confidentiality as referred to in the Act does not necessarily apply to other spatial data collections, e.g through administrative records, for different purposes than statistics. Staff members of spatial data providers and custodians or users must treat all spatial data that are considered privileged and/or sensitive as confidential

16 LIABILITY

Spatial data custodians shall act to protect the Government from liability in relation to clients using spatial datasets provided by the custodian.

This policy has the component that in supplying spatial data to users the custodian specifying, in appropriate legal terms in each circumstance, that (i) the Government, including any Minister or other government official or employee, shall not be liable in respect of anything done or omitted to be done in good faith in the collection, production and dissemination of any spatial dataset; (ii) the Government, including any Minister or other government official or employee, shall not be liable for the adverse consequences of any decision made by a user based on spatial data sets supplied; and (iii) the data is provided as is, without warranty of any kind, expressed or implied.

17 FUNDING AND CAPACITY DEVELOPMENT

The Government shall ensure appropriate and sustainable funding and capacity to establish and maintain the NSDI and its structures and ensure its effectiveness.

This policy has the following components:

- (a) Government ensuring that NSDI activities are adequately funded at all levels of government, and to this end establishing a Fund for NSDI activities to be administered by the NSA under the advice of the NSDI Committee;
- (b) The NSA assigning appropriate and sustained capacity for the initial development of the NSDI and ongoing administration thereof;
- (c) All spatial data custodians ensuring adequate and sustained capacity to regularly update their spatial data;
- (d) all spatial data custodians developing a spatial data infrastructure capacity plan linked to the execution of this Policy and to annually report to the NSDI Committee on its capacity development plan and progress;
- (e) Capacity development for NSDI being owned and managed by those whose capacity is undergoing development; and

- (f) Every spatial data project conducted by Government including a training and capacity development component for various grades of employees (e.g. operators, supervisors, managers) to meet specific institutional and individual training and capacity needs.

18 EDUCATION

The NSA and other stakeholders in the NSDI shall disseminate information to educate, and raise the awareness of the public about (i) the functions of the NSA and other institutions relating to NSDI, and (ii) the availability, purpose and use of spatial data and services, and by so doing contribute to developing an informed society; education on NSDI shall be appropriately integrated into the Namibian education/academic system at all levels of schooling and supportive and explanatory materials shall be made available free of charge to all education/academic institutions on request, within reasonable limits.

This policy has the component of spatial data custodians and research and training and education institutions maintaining close collaboration on technical and user issues in relation to spatial data and its analysis and processing.

19 POLICY IMPLEMENTATION

The NSDI Policy implementation process shall be guided by, inter alia, the following considerations, which are considered essential for success:

- (a) Principles of good governance being applied such as transparency, accountability, and prudent and responsible management to achieve cost-effectiveness, service delivery to the underserved, and dissemination of information to build an informed society;
- (b) The Government harmonising all relevant legal frameworks in Namibia to give effect to this Policy and strengthen the organs of state to execute this Policy;
- (c) This NSDI Policy implementation being closely aligned with Vision 2030 and other initiatives as set out in National Development Plans;
- (d) Government (specifically the NSA) establishing coordination mechanisms at different levels to promote the coordination of NSDI in Government;
- (e) Continuing outreach efforts being made to ensure ongoing government and political support for a functional NSDI;
- (f) Public-Private Partnerships being encouraged for the diversification and value-addition of spatial data products and services, and capacity-development; and
- (g) Integration into regional and African SDI development initiatives being achieved.

20 REVIEW OF THE NSDI IMPLEMENTATION

The NSDI Committee shall advise on and commission regular reviews of the NSDI implementation.

21 REVIEW OF THE POLICY

Given the dynamic nature of the NSDI, it is important to ensure that the Policy framework remains relevant, and adequately addresses all issues. The NSDI Committee shall, as

necessary and appropriate, establish mechanisms to identify relevant issues, trends and other matters that may affect the NSDI Policy. In addition, the NSDI Committee shall advise on the establishment of a formal mechanism for regular reviews of this Policy, taking into consideration the data collected, the research done and feedback from key stakeholders. Therefore the Policy will be reviewed regularly and will be kept current in response to new developments. The reviews will also take into account the NSA Strategic and Business Plans. The reviews can result in more detailed statements, guidelines and procedures over time.

SCHEDULE 1

Standards will be produced, taking into account any work already done, relating to (Statistics Act 36 (1)(b)):

- (i) The manner and specification for the capturing of spatial data, including any application or exemption from such manner or specification;
 - (ii) measures relating to the avoidance of duplication of capture and safeguarding the integrity of captured spatial information;
 - (iii) the sharing and integration of spatial data;
 - (iv) the capture and publishing of metadata;
 - (v) manner and refusal of access to and dissemination of spatial data;
 - (vi) supply of and accountability for spatial data;
 - (vii) agreements on the utilization of spatial data;
 - (viii) maintenance of and reporting on spatial data; and
 - (ix) security of spatial data; and Additional standards will be developed for:
 - (a) data content standard specifying the data elements to be included;
 - (b) data exchange formats relying on non-proprietary software
 - (c) Minimum spatial data quality standards for each dataset for each of the following parameters
 - Lineage
 - Logical consistency
 - Completeness
 - Positional accuracy
 - Temporal accuracy
 - Spatial resolution
 - Scale
 - Attribute / semantic accuracy.
 - (d) spatial referencing standard.
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