**Common Statistical and Geospatial Definitions**

**Common Geography**

A common geography are an agreed set of geographies for the display, storage, reporting, and analysis of social, economic and environmental comparisons across statistical datasets from different sources. They enable the production and dissemination of integrated statistics and geospatial information within a country to support informed decision-making.

**Data Management Environment**

A data management environment holistically encompasses the tools, storage, and environment for acquiring, validating, storing, protecting, and processing required data to ensure the accessibility, reliability, and timeliness of the data for its users.

**Discrete Global Grid System (DGGGS)**

The DGGS represent the Earth as a hierarchy of equal area cells with progressively finer spatial resolution. Individual observations can be assigned to a cell corresponding to both the position and size (or uncertainty) of the phenomenon being observed. DGGSs provide significant benefits when encoding, scaling, threading, streaming, combining, and analysing spatial data.

**Fundamental Geospatial Infrastructure**

A Fundamental Geospatial Infrastructure encapsulates the NSDI (see below) and standards, technologies, policies, best practices, amongst other key elements to enable the provision of geospatial information with a country. The UN-GGIM endorsed Integrated Geospatial Information Framework[1] can provide this infrastructure, if such country-level infrastructure is not yet established.

**Geocoding**

For the purposes of the Global Statistical Geospatial Framework, geocoding is generally defined as the process of geospatially enabling statistical unit records so that they can be used in geospatial analysis. More specifically, geocoding is the process of linking unreferenced location information (e.g. an address), that is associated with a statistical unit, to a geocode (i.e. a geospatially referenced object). Alternatively, the geocode can be directly incorporated into the statistical unit record.

Geocodes are, preferably, fine scale geospatially referenced objects that are stored as a geometry data type, such as: location coordinates (i.e. x, y, z coordinates) and/or small area geographies (e.g. mesh blocks, block faces or similar small building block geographies). Larger geographic units, such as enumeration geographies, can be used as geocodes where finer scale geospatial units are not available.

The linkage of a geocode to a statistical unit record can occur through use of standard geographic coding systems, a Uniform Resource Identifier (URI) or through other computer-based linkage mechanisms.

**Geographic Feature**

A geometric representation of a feature. This can be a physical feature such as a unit record, a dwelling, or property or a functional area such as an administrative boundary or an economic area.

**Georeferencing**

Georeferencing is a set of broad processes that includes geocoding. It is the process of referencing data against a known geospatial coordinate system, by matching to known points of reference in the coordinate system (e.g. image rectification to survey points or addresses linked to parcel centroids), so that the data can be viewed, processed, queried and analysed with other geographic data.

**Geospatially-Enabled Statistics**

Location or geospatial-extent are the main characteristics of geospatially-enabled statistics. Furthermore, it is recommended that all statistical unit record data should be collected or associated with a location reference, and that ideally it should allow for geospatial coordinates with x- and y-values to be produced for each record.

**Interoperability**

Interoperability is the ability of a system to exchange and make use of information, enabled through the application of open standards.

**Location information**

Location information can include addresses, property or building identifiers, as well as other location descriptions, such as enumeration geographies and other standardised and non-standardised (e.g. village names) textual descriptions of a location.

**National Spatial Data Infrastructure**

A National Spatial Data Infrastructure are the technology, policies, standards, good practices, and human resources necessary to acquire, process, store, distribute, and improve utilization of geospatial data. A successful NSDI implementation addresses the following considerations:

- Maintenance of data and systems;
- Redundancies should be built into the dissemination solution to prevent a single point of failure;
- Final review and pre-processing before release (data disclosure and confidentiality) to prevent disclosure issues; and,
• Generalization and thinning of spatial data should be implemented to ensure that the data meets the minimum level of quality and is useable at defined scaled supporting both large and small-scale needs. This can impact both cartographic and data storage issues.

Reproducibility

Statistical Unit Records

Statistical Unit Records can include persons, households and living quarters, businesses, buildings or parcels/units of land.