
GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

NO. 3128

10 March 2023

SPATIAL INFORMATION STANDARDS MADE IN TERMS OF SECTION 11 OF THE SPATIAL DATA INFRASTRUCTURE ACT, 2003 (ACT No. 54 OF 2003)

I, Angela Thoko Didiza, Minister of Agriculture, Land Reform and Rural Development, hereby, under section 11 of the Spatial Data Infrastructure Act, 2003 (Act No. 54 of 2003), determine standards to facilitate the sharing and integration of spatial information. A list of standards are set out in the Schedule hereto. These standards will come into operation one month from the date of publication hereof in the *Gazette*.



MS A T DIDIZA
MINISTER: AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

SCHEDULE

STANDARD NUMBER	NAME OF STANDARD	EXPLANATORY INFORMATION ABOUT A STANDARD
SANS 1878-1 (SANS 1878-1:2011 Edition 1.1)	Geographic information— South African spatial metadata standard Part 1: Core metadata profile	The objective of this part of SANS 1878 is to provide a structure for describing geographic data. It is intended for use by, amongst others, Spatial Information Science users, planners and systems analysts, in order to understand the basic principles and overall requirements of standardization of spatial geographic information. This part of SANS 1878 defines metadata elements, provides a schema and provides a common set of metadata terminology, definitions and extension procedures.
SANS 19115 (SANS 19115:2003 Edition 1 & ISO tech. corr. 1, nat. amdt 1) (ISO 19115:2003 Edition 1 & tech. corr. 1)	Geographic information — Metadata standard	The objective of this International Standard is to provide a structure for describing digital geographic data. This International Standard is intended to be used by information system analysts, program planners, and developers of geographic information systems, as well as others in order to understand the basic principles and the overall requirements for standardization of geographic information. This International Standard defines metadata elements, provides a schema and establishes a common set of metadata terminology, definitions, and extension procedures.
SANS 19115-2 (SANS 19115-2:2010 Edition 1) (ISO 19115-2:2009 Edition 1)	Geographic information — Metadata standard Part 2: Extensions for imagery and gridded data	The object of this part of ISO 19115 is to provide the additional structure to extensively describe the derivation of geographic imagery and gridded data. This structure is intended to augment ISO 19115.
SANS 1880 (SANS 1880:2014)	Geographic information — South African Geospatial Data Dictionary	A feature catalogue defines the types of geographical features one would find in a data set, together with their attributes and other peculiarities. These feature types are assembled from feature concepts, which are defined in a feature concept dictionary, which in turn is unstructured and unordered. This standard feature concept dictionary for South Africa will enable all users of geographical information systems (GISs) to have a shared understanding of the contents of geographical data sets, thereby promoting the dissemination and interoperability of data sets, and reducing confusion and misinterpretation of data.
SANS 1883 (SANS 1883-1:2009)	Geographic information — National Address standard	This standard specifies and defines the data elements, as well as the address types that can be constructed from the data elements for South African addresses. The standard further defines terms and definitions related to addresses in South Africa. It is applicable to addresses covering the whole of South Africa. The standard applies to addresses that describe the physical location of a point of service delivery, and that could be geo-referenced.

STANDARD NUMBER	NAME OF STANDARD	EXPLANATORY INFORMATION ABOUT A STANDARD
SANS 1883 (SANS 1883-2:2018)	Geographic information — National Address standard	This part of SANS 1883 provides guidelines for the allocation and maintenance of addresses for the official address types specified in part 1 of this standard. It gives rules, orientation, advice and recommendations relating to the use of part 1. It applies to any area where the development correlates with the underlying cadastre, including previously unaddressed areas. In terms of address allocation, the guidelines specify how addresses should be arranged geographically. For address maintenance, the guidelines specify how addresses should be updated in the case of name changes, boundary changes, subdivisions, and consolidations.
SANS 19158 (SANS 9158:2012)	Geographic information — Quality Assurance of Data Quality	The standard provides a framework for quality assurance specific to geographic information. It is based upon the quality principles and quality evaluation procedures of geographic information identified in ISO 19157 and the general quality management principles defined in ISO 9000.
SANS 19131 (SANS 19131:2012)	Geographic information — Data Product Specification	The standard describes requirements for the specification of geographic data products, based upon the concepts of other ISO 19100 International Standards. It also provides help in the creation of data product specifications, so that they are easily understood and fit for their intended purpose.
SANS 19157 (SANS 19157:2014)	Geographic information — Data Quality Standard	The standard defines a set of data quality measures for use in evaluating and reporting data quality. It is applicable to data producers providing quality information to describe and assess how well a data set conforms to its product specification and to data users attempting to determine whether or not specific geographic data are of sufficient quality for their particular application.
SANS 19128 (ISO 19128:2008)	Geographic information — Web Map Server Interface	The standard describes the interface for a Web Map Server (WMS). WMS allows a client to request a map image, for example, a JPEG file, from a web service. OpenGIS Web Map Tile Service Implementation Specification is a similar standard. Through implementing a WMS interface, data can be exposed in a standardized way so that any client familiar with the WMS interface can request a map image of available data. The client specifies parameters, such as the data source, bounding box, and symbology for the map, through the interface. WMS does not generate map elements, such as a legend. The service can be reused by different clients and is more cost effective than developing a custom service.
SANS 19142 (ISO 19142:2010)	Geographic information — Web Feature Services	The standard specifies the behaviour of a web feature service that provides transactions and access to geographic features in a manner independent of the underlying data store. It specifies discovery operations, query operations, locking operations, transaction operations and operations to manage stored parameterized query expressions.

The standards listed above are available to the appointed Base Data Set Coordinators and Base Data Set Custodians on request by emailing: nsif@drdlr.gov.za.