



SASDI CSI



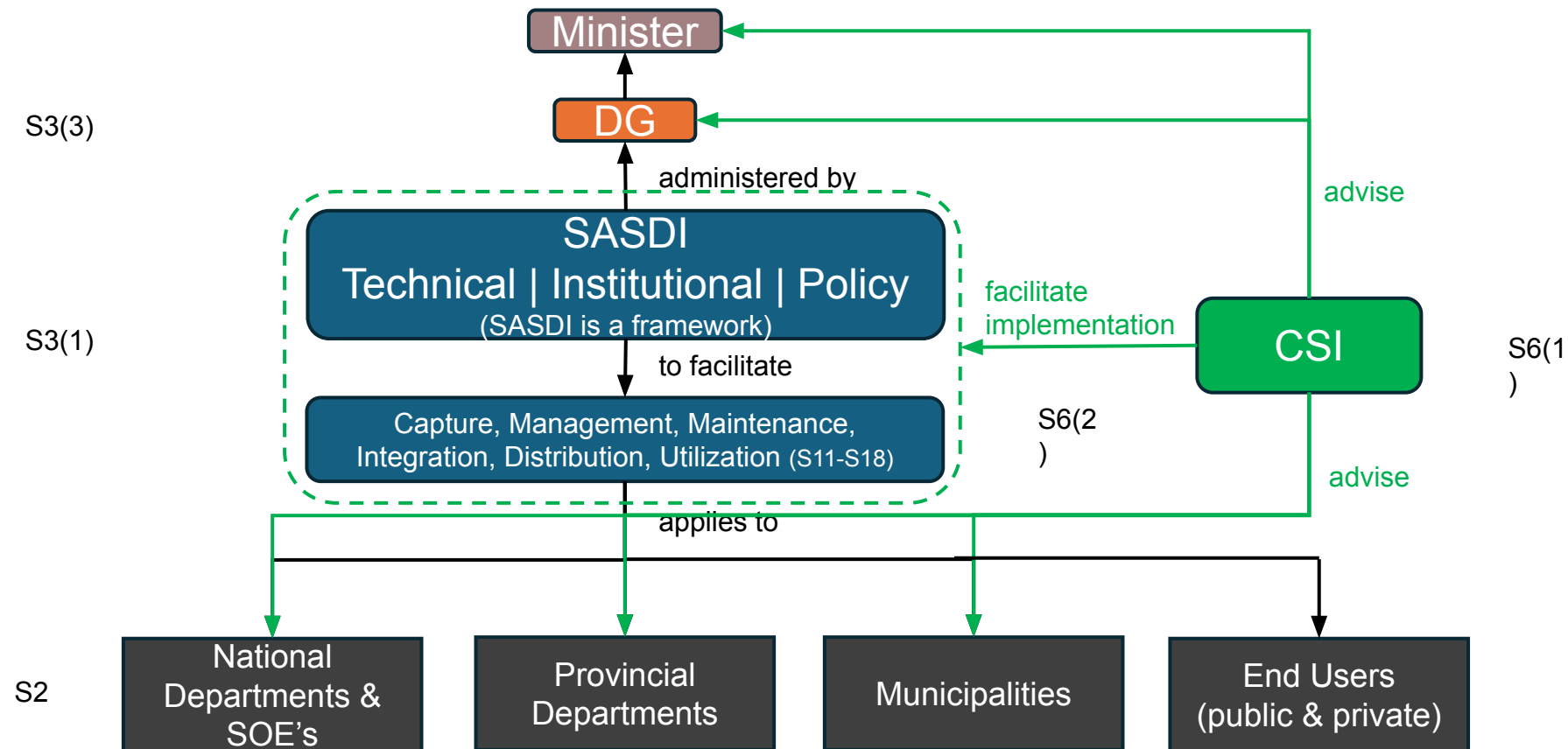
Subtitle or session name

Dali Mdunge, CSI
01 October 2026



SASDI and CSI Context

The Act - Mapped



SASDI/CSI Objectives & Role



SASDI



Facilitate:
Collection, Management,
Maintenance, Integration,
Distribution, and Utilization
of Spatial Data through:

End User



For Planning, Research, Policy, Investment, Construction, etc

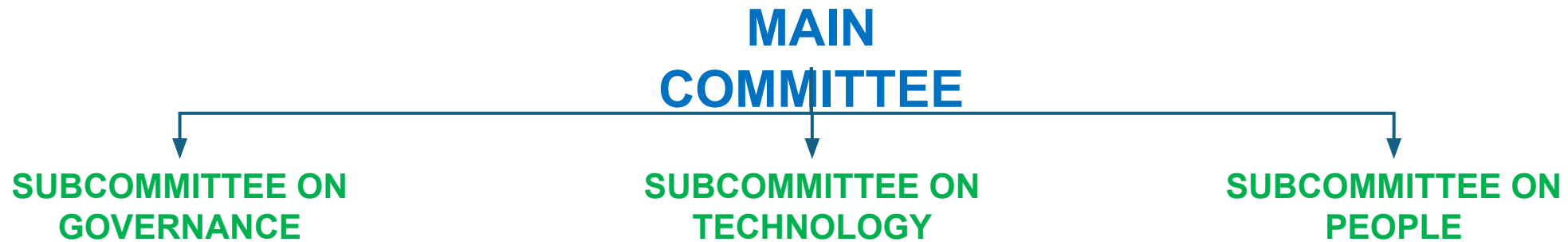
Regulations | Structures | Tools



**Spatial Data
Custodian**



CSI STRUCTURE (4th CSI: 2025 – 2028)



Representatives from:

- National Departments
- Provincial Government
- Local Municipalities
- SOE's
- Professional Bodies

“To have a South African Spatial Data Infrastructure that enables sharing and integration of credible spatial data for all, to support effective governance, planning, and decision making.”

Regulatory Framework

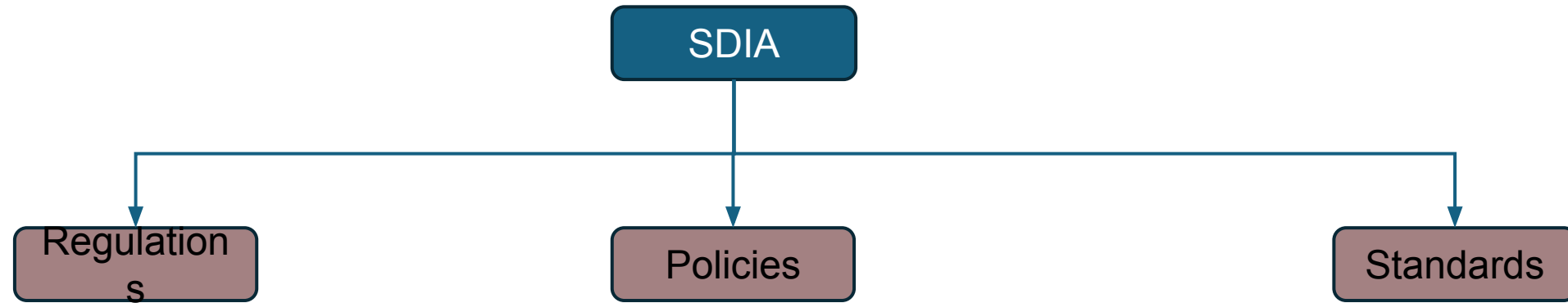
Regulations

SDI Act of 2003 S20:

20. (1) The Minister may by notice in the Gazette make regulations in respect of-

- a) any matter which is required or permitted to be prescribed under this Act:
- b) criteria for the nomination, selection and appointment of any person as a member of the Committee;
- c) **the manner and specification for the capturing of spatial information, including any application for exemption from such manner or specification;**
- d) **measures relating to the avoidance of duplication of capture, safeguarding the integrity of captured spatial information, and access to and distribution of spatial information; and**
- e) any administrative or procedural matter necessary to give effect to the objects of this Act

Regulations, Policies and Standards



1. Regulations made in terms of SDIA (41203) (2017)

1. Base Data Set Custodianship Policy (38474) (2015)
2. Policy on Pricing of Spatial Information Products and Services (38474) (2015)

1. Spatial Information Standards (2011)

STANDARDS AND PRESCRIPTIONS

2. Adherence to standards and prescriptions
3. Identification and publication of standards
4. Determining standards

SPATIAL DATA AND SPATIAL INFORMATION

5. Capturing and publishing of metadata and data capture projects
6. Supply and accountability for spatial information
7. Maintenance of data sets
8. Data quality
9. User needs
10. Security of spatial information

Published Standards

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 1878-1 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 19115-2 is to provide the additional structure to extensively describe the derivation of geographic imagery and gridded data. This structure is intended to augment ISO 19115-1.
SANS 1880 (SANS 1880:2014)	Geographic information — South African Geospatial Data Dictionary and its application	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 1883-1 (SANS 1883- 1:2009)	Geographic information — National Address standard Part 1: Data Format of addresses	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.

Published Standards

STANDARD NUMBER	NAME OF STANDARD	EXPLANATORY INFORMATION ABOUT A STANDARD
SANS 1883-3 (SANS 1883-2:2009)	Geographic information — National Address standard Part 3: Guidelines for address allocation and updates	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@dlrrd.gov.za.

Electronic Metadata Catalogue (EMC)

SPATIAL DATA AND SPATIAL INFORMATION

Capturing and publishing of metadata and data capture projects

5. (1) (a) A data custodian must make its metadata available to the Department, as contemplated in section 12(2)(a) of the Act, by capturing metadata in the electronic metadata catalogue referred to in section 4(1)(d) of the Act.

(b) The metadata captured should contain at least the required core metadata elements as identified in an approved national standards.

(c) A request to embark on an exercise to capture spatial data or spatial information contemplated in subregulation (2) and a request approved or refused in terms of subregulation (5), must be registered in the Data Capture Project Register and included as provisional metadata in the electronic metadata catalogue within 10 working days.

CUSTODIANSHIP VERSUS COORDINATION

Structured to Facilitate Collaboration

Custodianship	Coordination
Who is accountable for the dataset?	Who must align around the dataset?
Produces, validates, maintains and archives	Convenes, aligns, resolves gaps and prevents duplication
Owens specification, metadata and quality report	Agrees standards, roles, update cycles and sharing rules
Publishes authoritative versions	Ensures national discoverability and integration
Reports on quality, currency and continuity	Escalates cross-institutional risks and dependencies

DLRRD Role and Responsibility

#	Theme	Coordinator	Data sets	Custodians	Data Access Link / Contact Person
		Department of Environmental Affairs, Fisheries and Forestry	Protected Areas	Provincial departments of Environment and Management Authorities	
5.	Geodesy	Department of Agriculture, Land Reform and Rural Development	Trigonometrical Stations Town Survey Mark Trigonometrical Beacon TSM Scheme TrigNet Benchmark	Chief Directorate: National Geospatial Information	sales@dalrrd.gov.za http://cdngiportal.co.za/cdngiportal/

Regulated Project Registration Process – To Facilitate the Discovery of Spatial Data

Data Custodian
Notification to Capture
Spatial Data/Information

- Forms E1 and E2

Agent
Request to Capture
Spatial Data/Information

CSI
Register Spatial Data/Information
Collection Project on EMC

CSI
Process Request to Capture Spatial
Data/Information

End-Users
Access to EMC
Information

To be completed by Base Dataset Custodians to inform CSI of intention to capture spatial data

Name of organisation:		CSI reference number (for office use only):											
		Urgency (mark with X)											
		<table border="1"> <tr> <td>Low</td> <td>Medium</td> <td>High</td> </tr> </table>		Low	Medium	High							
Low	Medium	High											
Level of organisation (mark with X)		Data usage restrictions (mark with X)											
<table border="1"> <tr> <td>National</td> <td>Provincial</td> </tr> </table>		National	Provincial	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>Not applicable</td> </tr> </table>		Yes	No	Not applicable					
National	Provincial												
Yes	No	Not applicable											
Organisation address:		Proposed dataset title:											
Person name:													
Designation:													
Phone Number:													
Fax Number:													
Email Address:		Lineage statement (optional if existing dataset is used as part of capture process):											
Proposed capture start date:													
Proposed capture end date:													
Post in SA Republic:													
Geographical area:													
<table border="1"> <tr> <td>Provincial</td> <td>Tribal</td> </tr> </table>		Provincial	Tribal										
Provincial	Tribal												
Boundaries:													
<table border="1"> <tr> <td>Is</td> <td>Other</td> </tr> </table>		Is	Other										
Is	Other												
Data Type:													
<table border="1"> <tr> <th>Vector</th> <th>Raster</th> </tr> <tr> <td>Point</td> <td>Satellite imagery</td> </tr> <tr> <td>Network</td> <td>Radar</td> </tr> <tr> <td>Line</td> <td>Aerial photography</td> </tr> <tr> <td>Polygon</td> <td>Other imagery</td> </tr> </table>		Vector	Raster	Point	Satellite imagery	Network	Radar	Line	Aerial photography	Polygon	Other imagery		
Vector	Raster												
Point	Satellite imagery												
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Line	Aerial photography												
Polygon	Other imagery												
Proposed spatial resolution or scale of capture:		Method of capture (mark with X)											
		<table border="1"> <tr> <td>Aerial photography</td> <td>Survey (cadastral)</td> </tr> <tr> <td>Remote sensing</td> <td>Survey (questionnaire)</td> </tr> <tr> <td>Digitising</td> <td>Scanning & vectorising</td> </tr> <tr> <td>GPS coordinate capture</td> <td>Other</td> </tr> </table>		Aerial photography	Survey (cadastral)	Remote sensing	Survey (questionnaire)	Digitising	Scanning & vectorising	GPS coordinate capture	Other		
Aerial photography	Survey (cadastral)												
Remote sensing	Survey (questionnaire)												
Digitising	Scanning & vectorising												
GPS coordinate capture	Other												
Associated attributes:		Detail method of capture:											
Request submitted by:		Designation:											
Signature of applicant:		Date:											



SASDI Relevant Documents

Thank you

