
# ARCTIC SPATIAL DATA INFRASTRUCTURE GLOSSARY OF TERMS

A collective work by the national mapping agencies of the eight Arctic countries: Canada, Finland, Iceland, Norway, Russia, Sweden, United States of America and the Kingdom of Denmark

Version 1.0

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# Arctic SDI Glossary of Terms - Version 1.0

| Acronym | Term | Definition | Source |
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| | Application | The use of capabilities, including hardware, software and data, to manipulate and process data for user requirements. Applications are designed to perform a specific function directly for the user or, in some cases, for another application program.<br><br>Related terms: Application Program, Application Software, End-User Software | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| API | Application Program Interface | The interface (calling conventions) by which an application program accesses operating systems and other services. An API provides a means of developing custom user interfaces. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Application Schema | Defines content and structure of both geographic data and other related data, and operations for manipulating and processing data by an application. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Applications Profile | The set of metadata properties, policies and guidelines defined for a particular metadata application or implementation. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Architectural Framework | Identifies key interfaces and services, and provides a context for identifying and resolving policy, management and strategic technical issues.<br><br>Related terms: Conceptual Architecture, Reference Architecture | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Arctic | Designating the north polar region of the Earth, which comprises the Arctic Ocean and land areas in parts of Canada, Kingdom of Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States of America.<br><br>The Arctic SDI is to cover the Arctic regions of the involved participating countries, as defined by the countries themselves. It can be identified and defined in many different ways depending on the parameters used (tree line, climate, Arctic Circle, temperature, flora, fauna, jurisdiction).<br><br>Related term: Polar, Circumpolar, Pan-Arctic | Oxford English Dictionary: http://www.oed.com/view/Entry/10461?redirectedFrom=Arctic#eid<br><br>Arctic SDI Framework Document: http://arctic-sdi.org/wp-content/uploads/2014/08/20150825-Arctic-SDI-Framework-Document_V2-0.pdf<br><br>Rapid Change in the Arctic, UNEP: http://www.unep.org/gc/gc27/Docs/se/What%20Future%20for%20the%20Arctic.pdf |
| | Arctic Community | Almost four million people live in the Arctic today, with the precise number depending on where the boundary is drawn. They include Indigenous Peoples and recent arrivals, hunters and herders living on the land, and city dwellers. Many distinct Indigenous groups are found only in the Arctic, where they continue traditional activities and adapt to the modern world at the same time. Humans have long been a part of the arctic system, shaping and being shaped by the local and regional environment. In the past few centuries, the influx of new arrivals has increased pressure on the arctic environment through rising fish and wildlife harvests and industrial development. The Arctic includes part or all of the territories of eight nations: Canada, Kingdom of Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States of America, as well as the homelands of dozens of Indigenous groups that encompass distinct sub-groups and | Arctic Council: http://www.arctic-council.org/index.php/en/our-work/arctic-peoples |

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| | | communities.<br><br>Related Terms: Northerners, Indigenous Peoples. | |
| Arctic SDI | Arctic Spatial Data Infrastructure | The Arctic Spatial Data Infrastructure (Arctic SDI) is a voluntary, multilateral cooperation between the Arctic countries to develop data, standards, applications, policies, and governance necessary to promote geospatial data sharing in an open, efficient and flexible way. The goal of the Arctic SDI is to provide politicians, governments, policy makers, scientists, private enterprises and Northerners with access to reliable and interoperable geospatial data, tools and services to facilitate monitoring and decision making in the Arctic. | Arctic SDI Framework Document: http://arctic-sdi.org/wp-content/uploads/2014/08/20150825-Arctic-SDI-Framework-Document_V2-0.pdf; Arctic SDI Fact Sheet 2015: http://arctic-sdi.org/wp-content/uploads/2015/09/Arctic-SDI-faktaark_tryksep15_2_low.pdf |
| | Arctic SDI Reference Model | A reference model in enterprise engineering parlance is an abstract framework consisting of an interlinked set of clearly defined concepts produced by an expert or body of experts in order to encourage clear communication. The purpose of the Reference Model is to aid strategic Arctic SDI discussions by grouping existing and potential SDI components. The Reference Model is the basis to implement the Vision through a consistent understanding of what needs to be done. All Arctic SDI projects link to the Reference Model. This reference model is also incorporated into the 2015-2020 Arctic SDI Strategic Plan. | Arctic SDI Framework Document: http://arctic-sdi.org/wp-content/uploads/2014/08/20150825-Arctic-SDI-Framework-Document_V2-0.pdf; Arctic SDI Strategic Plan 2015-2020: http://arctic-sdi.org/wp-content/uploads/2014/08/20151119-Arctic-SDI-Strategic-Plan-2015-2020_FINAL.pdf |
| | Arctic SDI Stakeholders | Include: the Arctic Council Working Groups, NGOs, research groups, universities, scientific communities, governments and governmental authorities, media and the public.<br><br>Related Terms: Arctic SDI users | Arctic SDI Implementation Plan: http://arctic-sdi.org/wp-content/uploads/2014/08/201511-Arctic-SDI-Implementation-Plan_FINAL.pdf |

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| | Arctic Stakeholders | Stakeholders are defined as actors who have interests in Arctic developments or who are affected by Arctic policies. | The Changing Arctic and the European Union: https://books.google.ca/books?id=j7C8CgAAQBAJ&pg=PA285&lpg=PA285&dq=Arctic+stakeholders+are+definition&source=bl&ots=8kVyHd6zwP&sig=5pcQNesXPh0tcFtT5Pjhu6gXI1s&hl=en&sa=X&ved=0ahUKEwifjOz4o-PJAhUi7YMKHUvJAHQQ6AEIKjAD#v=onepage&q=Arctic%20stakeholders%20are%20definition&f=false |
| | Attribute | Descriptive information about features or elements of a database. For a database feature like census tract, attributes might include many demographic facts including total population, average income, and age. In statistical parlance, an attribute is a `variable,` whereas the database feature represents an `observation` of the variable. | Open Geospatial Consortium: http://www.opengeospatial.org/taxonomy/term/13 |
| | Attribution | Ascribing the production of the data to a specific data custodian. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Basemap | A basemap provides a user with context for a map. It depicts background reference information such as landforms, roads, landmarks, and political boundaries, onto which other thematic information is placed. A basemap is used for locational reference and often includes a geodetic control network as part of its structure. In the context of Arctic SDI it is applied to topographic maps, using authoritative data from the Arctic National Mapping Agencies, to be used in the construction of other types of maps by the addition of particular data. | USGS User Guide: http://nhd.usgs.gov/userGuide/Robohelpfiles/NHD_User_Guide/Interactive_Tutorials/Module_1/Basemaps_Overlays/Popups/What_is_a_Basemap_.htm<br><br>Geography Dictionary: http://www.geography-dictionary.org/base_map<br><br>Esri GIS Dictionary Support: http://support.esri.com/en/knowledgebase/Gisdictionary/browse |
| | Bathymetric Data | Data regarding the elevation of the earth's surface beneath a body of water, especially the ocean, typically determined by measurements of depth from the water surface. | USGS: http://www.usgs.gov/science/science.php?term=80&n=27 |
| | Capacity Building | Development of individuals with various profiles and backgrounds—through training and education—to meet well-defined objectives, usually within the scope of a program or project.<br><br>Related terms: Organisational Development, Institutional Strengthening, Improvement Management | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Case Studies | Analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| CSW | Catalog Service for the Web | Provide a registry service to support the ability to publish and search collections of descriptive information (metadata) for data, services, and related information objects. Metadata registered in catalogues represent resource characteristics that can be queried and presented for evaluation and further processing by both humans and software. Catalogue services are required to support the discovery and binding to registered information resources within an information community. | Natural Ressources Canada: http://www.nrcan.gc.ca/earth-sciences/geomatics/canadas-spatial-data-infrastructure/standards-policies/8910 |
| | Catalogue | A single collection of metadata entries that are managed together. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Catalogue Service | A service that responds to requests for metadata in a catalogue and that complies with certain browsing or search criteria. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Circumpolar | The area traditionally covered by the terms “Arctic” and “Subarctic,” the northern lands of the world’s eight northernmost countries (the Arctic Eight): Canada, Finland, Denmark (including Greenland and the Faroe Islands), Iceland, Norway, Russia, Sweden, and the United States (Alaska).<br><br>Related Terms: Pan-Arctic, Arctic, Polar | UArctic Education: http://education.uarctic.org/circumpolar-north/ |

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| | Clearinghouse | A distributed network of geospatial data producers, managers and users linked electronically. Incorporates the data discovery and distribution components of a spatial data infrastructure for a community. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Cloud Computing | A model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Conformance | Fulfillment of specified requirements. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Coordinate Reference System | A system that defines the coordinate space such that the coordinate values are unambiguous. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Copyright | A temporary monopoly granted over a work. Copyright protects a number of different rights over a work, chief of which is the right to create copies. The creator (or "author") of a work retains rights to that work but can transfer some or all of the rights to others. Re-creating a significant portion of a copyrighted work without permission is illegal. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Data | Distinct pieces of factual information, especially information organized for analysis or used to reason or make decisions. Data are usually formatted in a special way and presented in a variety of forms. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Data Collection | Data that has one or several common elements and that has been assembled by these common elements to form a data set.<br><br>Related terms: Product Collection | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Data Model | An abstraction of the real world. The data model would normally define specific groups of entities, their attributes, and the relationships between these entities. A data model is independent of a computer system and its associated file structures. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Data Product Specification | A detailed description of a data set or data set series together with additional information that will enable it to be created, supplied to and used by another party. | ISO 19131:2007: https://www.iso.org/obp/ui/#iso:std:iso:19131:ed-1:v1:en |
| | Data Provider | Data providers share data that is accessible under specific conditions.<br><br>Related terms: Data Custodian | How to Share Geospatial Data Primer: http://geoscan.nrcan.gc.ca/starweb/geoscan/servlet.starweb?path=geoscan/downloade.web&search1=R=292415 |

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| | Data Quality | Indications of the degree to which data satisfies stated or implied needs. This includes information about lineage, completeness, currency, logical consistency and accuracy of the data. | Open Geospatial Consortium: http://www.opengeospatial.org/taxonomy/term/13 |
| | Decision-maker(s) | An individual (or group of individuals) who uses a cognitive process to select a final option between several other scenarios. The final decision should result in an action. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Developer | An individual who creates Web-based applications that allow users to interact with a SDI. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| DEM | Digital Elevation Model | The representation of continuous elevation over a topographic surface by a regular gridded array of elevation values (z-values) referenced to a common vertical datum representing the "Bare Earth" conditions.<br><br>Related terms: Digital Terrain Model (DTM), Digital Surface Model (DSM) | GIS Dictionary Support: http://support.esri.com/en/knowledgebase/Gisdictionary/browse ; LiDAR Data Services: http://www.lidardataservices.com/services/dtm-dem-and-dsm-generation |
| DSM | Digital Surface Model | Digital Surface Model (DSM) represents the highest elevations of the reflective surfaces of trees, buildings, and other features elevated above the “Bare Earth”. | LiDAR Data Services: http://www.lidardataservices.com/services/dtm-dem-and-dsm-generation |
| DTM | Digital Terrain Model | Digital Terrain model (DTM) can be described as a three dimensional representation of a terrain surface consisting of X, Y, Z coordinates stored in digital form. It includes not only terrain elevation, but also natural features such as rivers, ridge lines, etc. Natural features are called break lines. | LiDAR Data Services: http://www.lidardataservices.com/services/dtm-dem-and-dsm-generation |

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| ELF | European Location Framework | A versatile cloud-based and cascade-supporting architecture that provides up-to-date, authoritative, interoperable, cross-border, reference geo-information for use by the European public and private sectors. | European Location Framework: http://www.elfproject.eu/content/overview |
| XML | Extensible Markup Language | A markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. It is defined in the XML 1.0 Specification produced by the W3C, and several other related specifications. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Feature | An abstraction of real world phenomena. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Framework | Software design, a reusable software template, or skeleton, from which key enabling and supporting services can be selected, configured and integrated with application code.<br><br>Related terms: Information Architecture | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Framework Data | Common base map data that provides spatial reference to physical features and other types of information that is linked to geography and provides a foundation for integrating other kinds of data.<br><br>Related terms: Reference Data, Fundamental Data, Core Data | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Gazetteer | Directory of instances of a class or classes of features containing information regarding position. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| GIS | Geographic Information System | An information system for capturing, storing, checking, integrating, manipulating, analyzing and displaying data related to positions on the Earth's surface. Both vector and raster GISs are available.<br><br>Related terms: Geographic Information Service | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| GML | Geography Markup Language | The Geography Markup Language (GML) is an XML grammar for expressing geographical features. GML serves as a modeling language for geographic systems as well as an open interchange format for geographic transactions on the Internet. As with most XML based grammars, there are two parts to the grammar – the schema that describes the document and the instance document that contains the actual data. A GML document is described using a GML Schema. This allows users and developers to describe generic geographic data sets that contain points, lines and polygons. | Open Geospatial Consortium: http://www.opengeospatial.org/standards/gml |
| | Geolinked Data | Data that is referenced to an identified set of geographic features without including the spatial description of those features. It is normally attribute data in tabular form (such as population counts) that refers to a known jurisdiction (such as provinces), where the elements (the provinces) are referred to by their unique identifier (such as the province name). | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Geomatics | The science and technology of gathering, analyzing, interpreting, distributing and using geospatial data. Geomatics encompasses a broad range of disciplines, including surveying, global positioning systems, mapping, remote sensing and cartography. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Geomatics Sector | Includes federal, provincial/state and municipal departments, non-profit organisations, academic organisations (universities, colleges) as well as commercial organisations that supply and use data, services and resources of a geospatial nature.<br><br>Related terms: Geomatics Industry, Geospatial Information Industry | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Geoportal | A type of Web portal used to find and access spatial information and associated geographic services (display, editing, analysis, etc.) via the Internet. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Georeferencing | The process of assigning a geographic location to a piece of information. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Geospatial Data | Data with implicit or explicit reference to a location relative to the Earth's surface.<br><br>Related terms: Geodata, Geographic Data, Location-Based Data, Spatial Data, Geospatial Information, Geographic Information, Geographically referenced | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Geospatial Privacy | The right to control access to geospatial information about one's self. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Geospatial Standard | Standards specify the content and structure of data. When data content is standardized, information can be accessed, exchanged and used by people and computers more effectively. The harmonization of geospatial standards is fundamental to ensuring the efficient exchange of location-based information. Standards for geospatial interoperability provide consistent and interoperable patterns for creating, reproducing, updating and maintaining geographic information and services for decision-makers in the public and private sectors. Standards have been developed to address specific interoperability challenges. Geospatial standards are technical documents that detail interfaces or encodings. Software developers and data producers use these documents to build open interfaces and encodings into their products and services. The standards also provide an indicator of quality, including the structure for encoding metadata to help identify geospatial data.<br><br>Related terms: Standards, Geospatial Data. | Natural Resource Canada: http://www.nrcan.gc.ca/earth-sciences/geomatics/canadas-spatial-data-infrastructure/8902 |
| GeoWeb | Geospatial Web | A term that implies the merging of geographical (location-based) information with abstract information on the Internet, creating an environment where one could search by location instead of keyword only. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | GIT Barents | The GIT Barents was "launched in the 1990's by the participating national mapping agencies in Finland, Norway, Russia and Sweden. The purpose was to increase the ability to use spatial information within the Barents Region by producing a common geographic database covering the entire region and to make data available to users by establishing an Internet--based infrastructure aligned with the principles of the EU INSPIRE Directive (EU Infrastructure for Spatial Information). The GIT Barents Service facilitates cross--border cooperation, primarily in the fields of environmental planning, monitoring and protection, land use, physical planning, transports, natural resource management and development of cross--border tourism." | Arctic SDI Framework Document: http://arctic-sdi.org/wp-content/uploads/2014/08/20150825-Arctic-SDI-Framework-Document_V2-0.pdf<br><br>GIT Barents Service: www.gitbarents.com Note: URL no longer in service (Last checked April 28, 2016). |
| HTTP | Hypertext Transfer Protocol | The Hypertext Transfer Protocol (HTTP) is an application-level protocol for distributed, collaborative, hypermedia information systems. It is a generic, stateless, protocol which can be used for many tasks beyond its use for hypertext, such as name servers and distributed object management systems, through extension of its request methods, error codes and headers. HTTP has been in use by the World-Wide Web global information initiative since 1990. | World Wide Web Consortium (W3C): https://www.w3.org/Protocols/rfc2616/rfc2616.html;The Internet Engineering Task Force (IETF®): https://tools.ietf.org/html/rfc2616 |
| | Hydrographic data | Data from measuring the depth of the water and fixing the position of all the navigational hazards that lie on the seafloor, such as wrecks and rocks. This is done mainly with specialised ships and boats operating echo sounders and sonars, but also using survey aircraft fitted with lasers. Useful information can also be derived sometimes from satellite observations. Hydrography also involves measuring the tide and the currents. | International Hydrographic Organization: https://www.iho.int/srv1/index.php?option=com_content&view=article&id=613:what-is-hydrography&catid=42&Itemid=852&lang=en |

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| | Identifier | Linguistically independent sequence of characters capable of uniquely and permanently identifying that with which it is associated. | International Organization for Standardization: https://www.iso.org/obp/ui/#iso:std:iso:19135:-1:ed-1:v1:en:term:4.1.5 |
| | Imagery | Digital data of the Earth collected by a variety of types of sensors (e.g., optical, radar) mounted on satellite, airborne or ground-based platforms. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| IP | Intellectual Property | Information that is useful and transferable, and in which someone has rights that give control over the information. Types of IP include invention, copyright, trade secrets, plant breeders' rights, integrated circuit topography, industrial design and trademark. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Interoperability | The ability of different types of computers, networks, operating systems and applications to work together effectively, without prior communication, in order to exchange information in a useful and meaningful manner. There are three aspects of interoperability: semantic, structural and syntactical. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Key Performance Indicators | A measurable objective which provides a clear indication of service centre capability, quality, customer satisfaction, etc. In the Arctic SDI context, key performance indicators are used to gauge the effectiveness of the implementation of the Arctic SDI Strategic Plan 2015-2020, as well as the effectiveness of the Arctic SDI itself. These qualitative or quantitative metrics will be measured, assessed and tracked yearly over the 2015-2020 timeframe with regular reports to the Arctic SDI Board:<br>• User satisfaction of authoritative reference and thematic data and services;<br>• Relevance of Arctic SDI reference and thematic data to users;<br>• The use of the Arctic SDI Geoportal, web services and metadata;<br>• Known applications based on the Arctic SDI and their relevance;<br>• Arctic SDI Operational Policies influence on the development of Arctic Council information management policies. | Guidelines for Core, Key Performance Indicators, Interim Report on Primary Service Channels: https://www.tbs-sct.gc.ca/si-as/kpi-icr/interim/interim-eng.rtf<br>Arctic SDI Implementation Plan: http://arctic-sdi.org/wp-content/uploads/2014/08/20151511-Arctic-SDI-Implementation-Plan_FINAL.pdf |
| | Layer | Basic unit of geographic information that may be requested as a map from a server. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Licence | A legal agreement granting someone permission to use a resource for certain purposes or under certain conditions that would otherwise be disallowed or unlawful. A licence does not constitute a change in ownership of the copyright. Includes data licenses and software licenses. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Licensing | Authorizing by the licensor the use of the licensed material by the licensee. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Life-cycle | Consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources to final disposal. | International Organization for Standardization: https://www.iso.org/obp/ui/#iso:std:37456:en |
| | Lineage | Linear referencing can be used to model the relationships of objects that are associated with an network, but where the position of those associated objects is not known (or required) to a very high level of absolute accuracy. | INSPIRE Glossary: http://inspire-regadmin.jrc.ec.europa.eu/dataspecification/themes/tn/Chapter10.pdf |
| | Linked Data | Creates links to data residing in other databases on the Web that are universally available. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| LBS | Location-Based Services | A wireless IP service that delivers and uses geographic information to serve a mobile user. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Marine data | Data regarding environments with marine water. | INSPIRE Glossary: http://inspire.ec.europa.eu/codelist/EnvironmentValue/marine |

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| MMG | Mass Market Geomatics | The preparation and online publication of geospatial data and services by private sector organisations such as Google Earth, Microsoft Virtual Earth and MapQuest. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Metadata | Information about data. Metadata describes how, when and by whom a particular set of data was collected, and how the data was formatted. Metadata is essential for understanding information stored in data warehouses. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | INSPIRE-Metadata | Means information describing spatial data sets and spatial data services and making it possible to discover, inventory and use them [INSPIRE Directive]. NOTE: A more general definition provided by ISO 19115 is data about data. | INSPIRE Glossary: http://inspire.ec.europa.eu/glossary/Metadata |
| | NAP-Metadata | North American Profile of ISO 19115:2003 – Geographic information – Metadata. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Metadata Catalogue | A system prepared to store and distribute information about geospatial ressources and to organize specific information into a set of data. Metadata in catalogues represent resource characteristics that can be queried and presented for evaluation and further processing by both humans and software. Catalogue services are required to support the discovery and binding to registered information resources within an information community. | Open Geospatial Consortium: http://www.opengeospatial.org/standards/cat Antarctica - Contributions to Global Earth Sciences: https://books.google.ca/books?id=2u1V-IEycvMC&pg=PA399&dq=%22Metadata+catalogue%22+definition&hl=en&sa=X&ved=0ahUKEwiPm63kkOPJAhUG5CYKHVR6CF4Q6AEILjAA#v=onepage&q=%22Metadata%20catalogue%22%20definition&f=false |
| | Metadata Entry | A set of metadata that pertains specifically to a spatial data set. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Metadata Schema | A semantic and structural definition of the metadata used to describe recordkeeping entities. It describes the names of metadata elements, how they are structured and their meaning. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Network Services | Network services make it possible to discover, transform, view and download spatial data and to invoke spatial data services. | INSPIRE Glossary: http://inspire.ec.europa.eu/documents/Spatial_Data_Services/Spatial%20Data%20Services%20Working%20Group%20Recommendations%20v2.pdf |

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| | Ontology | A formal representation of phenomena with an underlying vocabulary, including definitions and axioms, which makes the intended meaning explicit and describes phenomena and their interrelationships. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Open Data | A philosophy and practice that makes data easily and freely available—without restrictions from copyright, patents or other mechanisms of control—by way of portals, metadata and search tools in order to enable reuse of the data in new and unforeseen ways. Open data relies on 1) a permissive licensing model that encourages reuse, 2) data discoverability, and 3) data accessibility. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Open License | Enables third parties to reuse data with minimal or no legal or policy constraints, but copyright is maintained. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Open Standards | An open standard is one that 1) is created in an open, international, participatory industry process; 2) is freely distributed and openly accessible; 3) does not discriminate against persons or groups; and 4) ensures that the specification and license are technology neutral (its use must not be predicated on any proprietary technology or style of interface).<br><br>Related terms: Open Specification | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Operational Policies | A broad range of practical instruments such as guidelines, directives, procedures and manuals that address topics related to the life cycle of spatial data (i.e., collection, management, dissemination, use) and that help facilitate access to and use of spatial information. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Oskari | Arctic SDI geoportal is built using Oskari. Oskari is an open source software framework for creating geoportals and other web applications. Use cases for Oskari include viewing, disseminating and analyzing geographical data, especially from distributed SDI data sources. With Oskari it is possible to easily configure and embed map clients on other webpages, so that the data can be viewed in actual context. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Preservation | Protecting a collection of historical records (i.e., records that have been selected for permanent or long-term preservation on grounds of their enduring cultural, historical or evidentiary value) from destruction, decay or degradation. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Producer | An individual or institution that generates geographic information from data. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Profile | A set of one or more base standards or subsets of base standards and, where applicable, the identification of chosen clauses, classes, options and parameters of those base standards, necessary for building a complete computer system, application or function. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Protocol | A set of semantic and syntactic rules that determine the behavior of entities that interact. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Reference Data | Geospatial data depicting background locational information, often acting as a base for displaying thematic data. Reference data are officially recognized data that can be certified and provided by an authoritative source. These are delivered to be consumed by applications in a number of ways by different types of web services.<br><br>The following geospatial data layers have been listed as reference data layers in previous Arctic SDI documentation: administrative boundaries, elevation, bathymetric data, hydrography, transportation, settlements, vegetation, and geographical names. By listing the reference data layer above, it in no way infers all participant nations hold or will provide access to those listed data layers.<br><br>NOTE: The data layers cited in the reference data definition above are taken from the Arctic SDI Constitution Meeting Project Plan (6 April 2011) and were confirmed during the first Arctic SDI Board Meeting (31 March 2012; www.Arctic-SDI.org).<br><br>Related term: Reference Map | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf<br><br>Arctic SDI Framework Document: http://arctic-sdi.org/wp-content/uploads/2014/08/20150825-Arctic-SDI-Framework-Document_V2-0.pdf<br><br>UN-GGIM: EUROPE Preparatory Phase Working Group 1 – "Data Definition and Access Conditions" Report: Consolidated Version 11 April 2014: http://un-ggim-europe.org/sites/default/files/GGIM-Europe-Working%20Group%201%20-%20Report%20-%2020140411.pdf<br>www.Arctic-SDI.org |
| | Register | Set of files containing identifiers assigned to items with descriptions of the associated items. | International Organization for Standardization: https://www.iso.org/obp/ui/#iso:std:iso:19135:-1:ed-1:v1:en |

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| | Registry | A listing of the individual data sets, services or other things made available by an organisation to users of a SDI. There are two kinds of registries:<br><br>• Type Registry: A listing of different types or classes of objects, such as services, components or events, that are recognized by the SDI services or applications.<br><br>• Instance Registry: A listing of individual services, components, data sets or other things that comprise the SDI or are relevant to its users. Instance registries are used to identify, locate and describe individual instances.<br><br>Related terms: Catalogue, Directory, Inventory | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Semantic Web | Enables queries across the Web, as if the entire Web were a single federated database. In addition, the concept of a Semantic Web refers to the understanding of a machine or computer to find links or similarities to the searched data in order to provide the most useful search results. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Semantics | In the spatial data context, semantics deal with representations of the geographical world as interpreted by human users or communities of practitioners. Defines the meaning of geospatial functions (e.g., the meaning of the input data, the capability of this function, the meaning of the output data). | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Sensitive Data | Geospatial data that may be considered restricted for purposes of dissemination and therefore requires some form of safeguarding. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| SOA | Service-Oriented Architecture | A set of principles and methodologies for designing and developing software in the form of interoperable services. SOA separates functions into distinct units or services, which developers make accessible over a network in order to allow users to combine and reuse them in the production of applications. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Spatial Data | Data with a direct or indirect reference to a specific location or geographic area. | INSPIRE Glossary: http://inspire.ec.europa.eu/glossary/SpatialData |
| SDI | Spatial Data Infrastructure | The relevant base collection of standards, policies, applications, and governance that facilitate the access, use, integration, and preservation of spatial data. It is provided for users and suppliers within all levels of government, the commercial sector, the non-profit sector, academia and citizens in general.<br><br>Related terms: Geospatial Data Infrastructure | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| SDI Evaluation | Spatial Data Infrastructure Evaluation | SDI evaluations are used to assess if the SDIs realize the intended objectives and benefits by providing a snapshot of its current state. They are an integral part of SDI policies that assess the impact and efficiency of access, the intensity of use, and the extent to which spatial data are shared with stakeholder organisations and individuals.<br><br>SDI evaluations are performed to:<br>• Obtain more knowledge about SDI functioning<br>• Determine if the SDI is on the intended | Assessing Spatial Data Infrastructures: http://www.ncgeo.nl/phocadownload/76Grus.pdf<br>2015 Assessment of the Canadian Geospatial Data Infrastructure: http://geoscan.nrcan.gc.ca/starweb/geoscan/servlet.starweb?path=geoscan/fulle.web&search1=R=297880 |

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| | | track of development<br>• Assist SDI development<br>• Determine accountability<br><br>Related terms: SDI Assessment, Success Metrics | |
| | Spatial Data Services (discovery, view, etc.) | The operations which may be performed, by invoking a computer application, on the spatial data contained in spatial data sets or on the related metadata. | INSPIRE Glossary: http://inspire.ec.europa.eu/glossary/SpatialDataServices |
| | Spatial Data Set | A specific packaging of spatial (geospatial) information provided by a data producer or software, also known as a feature collection, image or coverage. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Spatial Object | Abstract representation of a real-world phenomenon related to a specific location or geographical area. Spatial objects are digitally represented as point, line and polygon, linked to attributes. Spatial objects contain the information about location such as latitude and longitude, as well as topology. | INSPIRE Glossary: http://inspire.ec.europa.eu/glossary/SpatialObject<br><br>DePaul University: http://gis.depaul.edu/shwang/teaching/arcview/module1.htm |
| | Spatial Schema | Conceptual schemas for describing and manipulating the spatial characteristics of geographic features. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Specification | A document written by a consortium, vendor or user that specifies a technological area with a well-defined scope, primarily for use by developers as a guide to implementation. A specification is not necessarily a formal standard. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Stakeholder | A stakeholder in a program is any person or institution that has a controlling influence, benefits in some way from the program, has an interest in its process or outcome, or has resources invested in the program. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Standard | Established by consensus and approved by a recognized body. A standard provides, for the common and repeated use of rules, guidelines or characteristics for activities or their results and is aimed at achieving the optimum degree of order in a given context. It is produced in the form of a published document and should be based on the consolidated results of science, technology and experience. It is also designed to promote optimum community benefits.<br><br>Related terms: Standardization | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Syntax | In the spatial data context, syntax defines how the meaning of geospatial functions is expressed. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Temporal Schema | Conceptual schemas for describing the temporal characteristics of geographic information as they are abstracted from the real world. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| | Thematic Data | Geospatial data focused on a specific theme or subject area, organized as layers related to physical or human geographies, e.g. statistical, water contamination, historical flood areas, disease patterns and trends. Thematic geospatial data are often viewed over reference data to provide context. Dataset providers could be governmental or interest organisations, companies etc. These datasets and metadata could be delivered and harvested by applications in a number of ways by different types of web services. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf<br><br>Arctic SDI Framework Document: http://arctic-sdi.org/wp-content/uploads/2014/08/20150825-Arctic-SDI-Framework-Document_V2-0.pdf www.Arctic-SDI.org |
| | Topology | Spatial relationships between adjacent or neighboring features; properties that define relative relationships between spatial elements, such as adjacency, connectivity and containment. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |

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| | Traditional Knowledge | Traditional knowledge refers to the knowledge, innovations and practices of Indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds. | United Nations Inter-Agency Group (IASG): http://www.un.org/en/ga/president/68/pdf/wcip/IASG%20Thematic%20Paper_%20Traditional%20Knowledge%20-%20rev1.pdf |
| UCD | User-Centered Design | Involves the input of users at various stages in the design of an application or system to ensure that it is easy to use and meets the needs of its users. UCD examines how an application is used, how people go about doing their work, how they want or need to work, how they think about their tasks, and how often they do particular tasks. | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| VGI | Volunteered Geographic Information | A term coined by Michael F. Goodchild, who defines it as “the widespread engagement of large numbers of private citizens, often with little in the way of formal qualifications, in the creation of geographic information…” (Goodchild M. F., 2007). | Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| WCS | Web Coverage Service | "Supports the networked interchange of geospatial data as "coverages" containing values or properties of geographic locations. Unlike the Web Map Service, which returns static maps (server-rendered as pictures), the Web Coverage Service provides access to intact (unrendered) geospatial information." | Open Geospatial Consortium: http://www.opengeospatial.org/taxonomy/term/13 |

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| WFS | Web Feature Service | An Internet-based service that allows clients to conduct data manipulation on geographic features, allowing for querying, retrieval and transactional (i.e., add, update or delete) operations. The WFS conforms to the OpenGIS Web Feature Server Interface specification. This OpenGIS Specification supports INSERT, UPDATE, DELETE, QUERY and DISCOVERY of geographic features. WFS delivers GML representations of simple geospatial features in response to queries from HTTP clients. Clients access geographic feature data through WFS by submitting a request for just those features that are needed for an application. | Open Geospatial Consortium: http://www.opengeospatial.org/taxonomy/term/13<br><br>Spatial Data Infrastructure (SDI) Manual for the Americas: http://unstats.un.org/unsd/geoinfo/RCC/docs/rcca10/E_Conf_103_14_PCIDEA_SDI%20Manual_ING_Final.pdf |
| WMS | Web Map Service | An Internet-based service that allows clients to display maps and/or images with a geographic component and whose raw spatial data files reside on one or more remote WMS servers. The WMS conforms to the OpenGIS Web Map Server Interface specification. This OpenGIS Specification standardizes the way in which Web clients request maps. Clients request maps from a WMS instance in terms of named layers and provide parameters such as the size of the returned map as well as the spatial reference system to be used in drawing the map. | Open Geospatial Consortium: http://www.opengeospatial.org/taxonomy/term/13 SDI Manual: |
| WMS-T | Web Map Service Time | The WMS-T standard allows the user of the service to set a time boundary in addition to a geographical boundary with their HTTP request.<br><br>Related term: WMS | QGIS: http://planet.qgis.org/planet/user/4/ |

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| WMTS | Web Map Tile Service (WMTS) | Web Map Tile Service (WMTS) provides access to cartographic maps of geo-referenced data, not direct access to the data itself. The tile service standard specifies the way in which map tiles are requested by clients, and the ways that servers describe their holdings. WMTS trades the flexibility of custom map rendering for the scalability possible by serving of static data (base maps) where the bounding box and scales have been constrained to discrete tiles. The fixed set of tiles allows for the implementation of a WMTS service using a web server that simply returns existing files. The fixed set of tiles also enables the use of standard network mechanisms for scalability such as distributed cache systems. | Natural Resources Canada: http://www.nrcan.gc.ca/earth-sciences/geomatics/canadas-spatial-data-infrastructure/standards-policies/8940<br><br>Open Geospatial Consortium: http://www.opengeospatial.org/standards/wmts |
| | Web Map Viewer | Interface for client computers to query, request and display spatial information from remote spatial databases. | Spatial Database Systems: Design, Implementation and Project Management: https://books.google.ca/books?id=_xEaJYJwiKoC&pg=PA540&dq=%22a+Web+map+viewer%22+glossary&hl=en&sa=X&ved=0ahUKEwj46eGGxePJAhXI64MKHeziAI4Q6AEIJDAA#v=onepage&q=%22a%20Web%20map%20viewer%22%20glossary&f=false |
| | Web Services | Self-contained, self-describing, modular applications that can be published, located and invoked across the Web. Web services perform functions that can be anything from simple requests to complicated business processes. Once a Web service is deployed, other applications (and other Web services) can discover and invoke the deployed service. | Open Geospatial Consortium: http://www.opengeospatial.org/taxonomy/term/13 |