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of the Generic Statistical Information Model

Generic Statistical Information Model (GSIM) Glossary of Information Classes (Version 2.0)

Prepared by the GSIM Task Team under the HLG-MOS Modernisation Group on Supporting Standards

Summary

This document presents the glossary of information classes (formerly known as "information objects") for the new version of Generic Statistical Information Model (GSIM, version 2.0) in a print-friendly format.

GSIM contains nearly 130 information classes, and each is described here in terms of its definition, with explanatory text and a list of attributes. Inspired by recent trends in online community-based collaboration, this latest version of the GSIM model has been deposited on a GitHub repository. That repository contains a range of useful reference materials, including an interactive (clickable) representation of the relationships between GSIM information classes, and is available at https://unece.github.io/GSIM-2.0/GSIMv2.html.

The previous version of the model (GSIM 1.2) was endorsed by the 68th plenary session of the CES in 2020. GSIM is part of a suite of models developed by High-Level Group on Modernization of Official Statistics (HLG-MOS), such as the Generic Statistical Business Process Model (GSBPM), Generic Activity Model for Statistical Organizations (GAMSO) and the Common Statistical Production Architecture (CSPA).

The review process, carried out by a dedicated task team under the HLG-MOS Modernization Group on Supporting Standards, is described in document ECE/CES/2024/3.

The Conference is invited to endorse the new version of GSIM.

Generic Statistical Information Model (GSIM): Glossary of Information Classes

(Version 2.0, January 2024)

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1. Base Group

Administrative Details

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Administrative Details			The <i>Administrative Details</i> is designed to act as a 'placeholder' to allow for future extensions to the existing model. It allows for further information to be added about the <i>Administrative Details</i> required to maintain the other information classes outlined by GSIM.	

Attributes

Name	Description	Cardinality	Value Type
Administrative Status	Indicator for access to an item: under review, open for use, or removed.	01	ControlledVocabulary
Alias	The alias or alia associated with the information class.	0*	String
Annotation	A comment or instruction which provides additional explanations about the information class and how to use it.	0*	String
Created Date	The date on which the information class was created.	01	Date
Documentation	An official document or paper that has been published by an organization.	0*	String
Last Updated Date	The date on which the information class was last changed.	01	Date
Life Cycle Status	Indicator for the quality of an item: incomplete, valid, superseded, or retired.	01	ControlledVocabulary
Url	Allows location of the information class. Distinct from the identification of the class as handled by the identifier attribute in <i>Identifiable Artefact</i> .	0*	String
Valid From	The start date included in the period during which the classis effective or valid. It is effective or valid from that date.	01	Date
Valid To	The end date included in the period during which the information classis effective or valid. It is no longer effective or valid after that date.	01	Date

Agent

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Agent	Base	someone or something that plays an active role in the lifecycle of an <i>Identifiable Artefact</i>	An Agent may be an Individual, an Organization (or part of it) or a Software Agent that affects in some way an instance of a GSIM class. For example, an Agent can play a role in the execution of a Business Processes or in the way a Statistical Classification (or a Concept) changes over time.	

Attributes

Attributes inherited from super-type(s) are not included here.

Agent in Role

Definition

Object	Group	Definition	Explanatory Text	Synonyms
Agent In Role	Base	An Agent acting in a specific Role.	In the Organization Ontology from W3C Agent In Role is called a "Post".	

Attributes

Name	Description	Cardinality	Value Type
Description	The description of the information object.	01	MultilingualText
Name	A term which designates a concept, in this case an information object. The identifying name will be the preferred designation. There will be many terms to designate the same information object, such as synonyms and terms in other languages.	11	MultilingualText

Change Event

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Change Event	Base	an Identifiable Artefact	A <i>Change Event</i> relates to the information class(es) that has(have) been affected. It can be applied to only one <i>Identifiable Artefact</i> and result in one or more <i>Identifiable Artefact</i> (s). On the other hand, a <i>Change Event</i> can be applied to more than one <i>Identifiable Artefact</i> and result in only one <i>Identifiable Artefact</i> .	

Attributes

Name	Description Ca		Value Type
Change Date	The date on which the <i>Change Event</i> occurred.	11	Date
Change Type	The type of change that occurred during the Change Event.	11	String
Identifier	The unique identifier of the <i>Change Event</i> that is applied to an information class; assigned by the owner agency.	11	String

Contact

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Contact	Base	Role in which Individual(s) is(are) responsible for providing additional information about an information class and/or its metadata, either directly or indirectly by linking to its source		

Attributes

Identifiable Artefact

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Change Event	Rase	abstract class that comprises the basic attributes and associations needed for identification, naming and other documentation	All GSIM classes except Administrative Details, Agent In Role, Change Event, Datum, Process Input (and its sub-types) and Process Output (and its sub-types) are a sub-type of Identifiable Artefact. In SDMX, "Identifiable Artefact" is defined as "construct that contains structures capable of providing identity to an object".	

Attributes

Name	Description	Cardinality	Value Type
Description	The description of the information class.	01	MultilingualText
Id	The unique identifier of the information class; assigned by the owner agency.	11	String
Local ID	This is an identifier in a given local context that uniquely references an information class. For example, Local ID could be a variable name in a dataset.	01	String
Name	A term which designates a concept, in this case an information class. The identifying name will be the preferred designation. There will be many terms to designate the same information class, such as synonyms and terms in other languages.	11	MultilingualText
Version	The version designator of the information class assigned by the owner agency.	01	String
Version Date	The date on which the version was created.	01	Date
Version Rationale	The reason for making this version of the information class.	01	String

Individual

Class	Group	Definition	Explanatory Text	Synonyms
Individual	Base	person who acts, or is designated to act towards a specific purpose		

Attributes inherited from super-type(s) are not included here.

Maintainer

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Maintainer	Race	Role in which a unit or group of persons within the Organization is responsible for managing an information class and its metadata	A unit or group of persons with the role of <i>Maintainer</i> is responsible for all administrative and operational issues relating to one or a set of information classes and its metadata (e.g. adding, modifying or deleting metadata about an information class). It is answerable to all stakeholders for all issues related to the information classes under its responsibility. A <i>Maintainer</i> is not a decision-making body. Decisions are made collaboratively among the owners of the artefact.	

Attributes

Attributes inherited from super-type(s) are not included here.

Organization

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Organization	Base	person or persons act, or are designated to act,	Organization represents a collection of people organized together, often with hierarchical structures. Examples of Organization: national statistics office, international agency	

Attributes

Owner

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Owner	LRace		Some information classes may have several <i>Owners</i> .	

Attributes

Attributes inherited from super-type(s) are not included here.

Role

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Role	Base	function assumed by an Agent	Part played by an <i>Individual</i> , an <i>Organization</i> (or part of it) or a <i>Software Agent</i> in a particular situation. Examples: <i>Contact</i> , data steward, scheduler. <i>Role</i> can be maintained by a controlled vocabulary (e.g. RASCI).	

Attributes

Attributes inherited from super-type(s) are not included here.

Software Agent

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Software Agent	Base	software that carries out <i>Process Step</i> based on <i>Process Control</i>	Examples: google bot	PROV "Software Agent", DDI "Machine"

Attributes

2. Business Group

Assessment

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Assessment		result of the analysis of the quality and effectiveness of any activity undertaken by a statistical organization and recommendations on how these can be improved	An <i>Assessment</i> can be of a variety of types. One example may include a gap analysis, where a current state is determined along with what is needed to reach its target state. Alternatively, an <i>Assessment</i> may compare current processes against a set of requirements, for example a new <i>Statistical Need</i> or change in the operating environment. An <i>Assessment</i> can use various classes as inputs, whether they are the main classes that the <i>Assessment</i> is about or auxiliary classes that help accomplish the <i>Assessment</i> .	

Attributes

Name	Description	Cardinality	Value Type
Date Assessed	Date when the Assessment took place	1*	Date
Issues	Issues identified through the Assessment	0*	String
Recommendations	Recommendations from the Assessment	0*	String
Results	Results from the Assessment	0*	String

Attributes inherited from super-type(s) are not included here.

Business Case

Class	Group	Definition	Explanatory Text	Synonyms
Business Case	Rusiness	work that will deliver outputs designed to achieve	A <i>Business Case</i> is produced as a result of a detailed consideration of a <i>Change Definition</i> . It sets out a plan for how the change described by the <i>Change Definition</i> can be achieved. A <i>Business Case</i> usually comprises various evaluations. The <i>Business Case</i> will specify the stakeholders that are impacted by the <i>Statistical Need</i> or by the different solutions that are	

Class	Group	Definition	Explanatory Text	Synonyms
			required to implement it. A <i>Business Case</i> will provide the reasoning for undertaking a <i>Statistical Support Activity</i> to initiate a new <i>Statistical Programme Design</i> for an existing <i>Statistical Programme</i> , or an entirely new <i>Statistical Programme</i> , as well as the details of the change proposed.	

Name	Description	Cardinality	Value Type
Date Approved	Date when the Business Case was approved	01	Date
Date Initiated	Date when the Business Case was initiated	01	Date
Outcomes (objectives)	Outcomes (objectives) that the proposed work in the Business Case would achieve	1*	String
Outputs (deliverables)	Outputs (deliverables) that the proposed work in the <i>Business Case</i> would deliver	1*	String
Туре	E.g. new programme, permanent (indefinite) change to existing programme, temporary change to existing programme, cease programme.	1*	ControlledVocabulary

Attributes inherited from super-type(s) are not included here.

Business Function

Class	Group	Definition	Explanatory Text	Synonyms
Business Function	Business	activities undertaken by a statistical organization to achieve its objectives	A Business Function delivers added value from a business point of view. It is delivered by bringing together people, processes and technology (resources), for a specific business purpose. Business Functions answer in a generic sense "What business purpose does this Business Service or Process Step serve?" (c.f. Business Process answers the question of "How?"). Through identifying the Business Function associated with each Business Service or Process Step, it increases the documentation of the use of the associated Business Services and Process Steps, to enable future reuse. A Business Function may be defined directly with descriptive text and/or through reference to an existing catalogue of Business Functions. The phases and subprocesses defined within GSBPM can be used as an internationally agreed basis for cataloguing	

Cla	ss	Group	Definition	Explanatory Text	Synonyms
				high-level <i>Business Functions</i> . A catalogue might also include <i>Business Functions</i> defined at a lower level than "sub-process". For example, "Identify and address outliers" might be catalogued as a lower level <i>Business Function</i> with the "Review and validate" function (5.3) defined within GSBPM.	

Attributes inherited from super-type(s) are not included here.

Business Process

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Business Process	Business	activity that performs one or	For example, a particular <i>Statistical Programme Cycle</i> might include several data acquisition activities, the corresponding editing activities for each acquisition and the production and dissemination of final outputs. Each of these may be considered separate <i>Business Processes</i> for the <i>Statistical Programme Cycle</i> .	

Attributes

Attributes inherited from super-type(s) are not included here.

Business Service

Class	Group	Definition	Explanatory Text	Synonyms
Business Service		performing a Business Function	A <i>Business Service</i> may provide one means of accessing a particular <i>Business Function</i> . The operation of a <i>Business Service</i> will perform one or more <i>Business Processes</i> . The explicitly defined interface of a <i>Business Service</i> can be seen as representing a "service contract". If particular inputs are provided then the service will deliver particular outputs in compliance within specific parameters (for example, within a particular period of time). Note: The interface of a <i>Business Service</i> is not necessarily IT based. For example, a typical postal service will have a number of service interfaces:	

Class	Group	Definition	Explanatory Text	Synonyms
			- Public letter box for posting letters - Counter at post office for interacting with postal workers	

Name	Description	Cardinality	Value Type
Service Interface	Specifies how to communicate with the service.	0*	String

Attributes inherited from super-type(s) are not included here.

Change Definition

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Change Definition	Business	structured, well-defined specification for a proposed change	A related class - the <i>Statistical Need</i> - is a change expression as it has been received by an organization. A <i>Statistical Need</i> is a raw expression of a proposed change, and is not necessarily well-defined. A <i>Change Definition</i> is created when a <i>Statistical Need</i> is analysed by an organization, and expresses the raw need in well-defined, structured terms. A <i>Change Definition</i> does not assess the feasibility of the change or propose solutions to deliver the change - this role is satisfied by the <i>Business Case</i> class. The precise structure or organization of a <i>Change Definition</i> can be further specified by rules or standards local to a given organization. It also includes the specific <i>Concepts</i> to be measured and the <i>Population</i> that is under consideration. Once a <i>Statistical Need</i> has been received, the first step is to do the conceptual work to establish what it is we are trying to measure. The final output of this conceptual work is the <i>Change Definition</i> . The next step is to assess how we are going to make the measurements - to design a solution and put forward a proposal for a body of work that will deliver on the requirements of the original <i>Statistical Need</i> .	

Attributes

Core Input

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Core Input	Business	essential input for the <i>Process Step</i> <i>Instance</i>	Core <i>Input</i> is a sub-type of <i>Process Input</i> . Producers of official statistics often conceptualise data (and sometimes metadata) flowing through the statistical <i>Business Process</i> , having statistical value added by each <i>Process Step</i> . The concept of Core <i>Input</i> allows this notional flow of information through the production process to be traced, without confusing these inputs with other inputs - such as <i>Parameter Inputs</i> and <i>Process Support Inputs</i> that are controlling or influencing a particular <i>Process Step</i> but do not "flow through the <i>Business Process</i> " in the same sense. Typical Core <i>Inputs</i> are <i>Data Sets</i> and structural metadata.	

Attributes

Attributes inherited from super-type(s) are not included here.

Core Output

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Core Output		key output of the Process Step Instance	A Core <i>Output</i> is a sub-type of <i>Process Output</i> . Typically a Core <i>Output</i> is either a <i>Process Input</i> to a subsequent <i>Process Step</i> or it represents the final product from a statistical <i>Business Process</i> . In many cases a Core <i>Output</i> may be readily identified as an updated ("value added") version of one or more <i>Core Inputs</i> supplied to the <i>Process Step Instance</i> .	

Attributes

Environment Change

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Environment Change	Business	operating environment of the statistical organization	An <i>Environment Change</i> reflects change in the context in which a statistical organization operates. <i>Environment Changes</i> can be of different origins and also take different forms. They can result from a precise event (budget cut, new legislation enforced) or from a progressive process (technical or methodological progress, application or tool obsolescence). Other examples of <i>Environment Changes</i> include the availability of a new <i>Information Resource</i> , the opportunity for new collaboration between organizations, etc.	

Attributes

Name	Description	Cardinality	Value Type
Change Origin	Origin of the Environment Change (e.g. external, internal)	11	String
Type	Type of the Environment Change (e.g. legal, method, software)	1*	ControlledVocabulary

Attributes inherited from super-type(s) are not included here.

Information Request

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Information Request	Business	for a particular purpose	An <i>Information Request</i> is a special case of <i>Statistical Need</i> that may come in an organized form, for example by specifying on which <i>Subject Field</i> the information is required. It may also be a more general request and require refinement by the statistical agency and formalised in a <i>Change Definition</i> .	

Attributes

Name	Description	Cardinality	Value Type
Coverage of Information Required	Coverage of the information required	11	String

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Name	Description	Cardinality	Value Type
Date Information Required	Date when the information is required	01	Date

Attributes inherited from super-type(s) are not included here.

Parameter Input

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Parameter Input	Business	Process Input that specifies the runtime configuration used in a parameterised Process Step Instance	Parameter Inputs may be provided where Rules and/or Business Service interfaces associated with a particular Process Step have been designed to be configurable based on Process Input Specification. Parameter Inputs are passed into the Process Step Instance.	

Attributes

Name	Description	Cardinality	Value Type
Data Type	The data type of the <i>Parameter Input</i> .	11	ControlledVocabulary
Parameter Role	Used to convey the role of this parameter. For example - weight, upper threshold, agreement level. This will likely become a controlled vocabulary (maybe external to allow more timely maintenance).	0*	String
Parameter Value	The content of the parameter.	11	String

Attributes inherited from super-type(s) are not included here.

Process Control

Class	Group	Definition	Explanatory Text	Synonyms
Process Control	Dusinass		The typical use of <i>Process Control</i> is to determine what happens after a <i>Process Step</i> is executed. The possible paths, and the decision criteria, associated with a <i>Process Control</i> are specified as part of designing a production process, captured in a <i>Process Control</i>	

Class	Group	Definition	Explanatory Text	Synonyms
			Design. There is typically a very close relationship between the design of a process and the design of a <i>Process Control</i> .	

Attributes inherited from super-type(s) are not included here.

Process Control Design

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Process Control Design	Business	specification of the decision points required during the execution of a <i>Business Process</i>	The design of a <i>Process Control</i> typically takes place as part of the design of the process itself. This involves determining the conditional routing between the various sub-processes and services used by the executing process associated with the <i>Process Control</i> and specified by the <i>Process Control Design. It is possible to define a Process Control where the next step in the Process Step</i> that will be executed is a fixed value rather than a "choice" between two or more possibilities. Where such a design would be appropriate, this feature allows, for example, initiation of a step in the <i>Process Step</i> representing the GSBPM Process Phase (5) to always lead to initiation of GSBPM sub-process Integrate Data (5.1) as the next step. This allows a process designer to divide a <i>Business Process</i> into logical steps (for example, where each step performs a specific <i>Business Function</i> through re-use of a <i>Business Service</i>) even if these Process Steps will always follow each other in the same order. In all cases, the <i>Process Control Design</i> defines and the <i>Process Control</i> manages the flow between <i>Process Steps</i> , even where the flow is "trivial". <i>Process Design</i> is left to focus entirely on the design of the process itself, not sequencing between steps.	

Attributes

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Process Design

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Process Design	Business	specification of each <i>Process Step</i> and description of their arrangement in a <i>Business Process</i> needed to perform a <i>Business Function</i>	A <i>Process Design</i> is the design time specification of a <i>Process Step</i> that is performed as part of a run-time <i>Business Service</i> . A <i>Process Step</i> can be as big or small as the designer of a particular <i>Business Service</i> chooses. From a design perspective, one <i>Process Step</i> can contain "sub-steps", each of which is conceptualised as a (smaller) <i>Process Step</i> in its own right. Each of those "sub-steps" may contain "sub-steps" within them and so on. It is a decision for the process designer to what extent to subdivide steps. At some level it will be appropriate to consider a <i>Process Step</i> to be a discrete task without warranting further subdivision. At that level the <i>Process Step</i> is designed to process particular <i>Process Inputs</i> , according to a particular <i>Process Method</i> , to produce particular <i>Process Outputs</i> . The flow between a <i>Process Step</i> and any sub steps is managed via <i>Process Control</i> .	

Attributes

Attributes inherited from super-type(s) are not included here.

Process Execution Log

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Process Execution Log	Business	1 6 6	It may include data that was recorded during the real-time execution of the Process Step.	

Attributes

Name	Description		Value Type
End Time	The time the <i>Process Step Instance</i> ended.	01	Date
Log Code	The identifier for the event that occurred during the process execution.	01	String
Log Message	The human readable message for the event that occurred during the process execution.	01	String

Name	Description		Value Type
Log Severity	The severity for the event that occurred during the process execution.		String
Log Type	The type of event that occurred during process execution (for example, an error).	01	ControlledVocabulary
Start Time	The time the <i>Process Step</i> started.	01	Date

Attributes inherited from super-type(s) are not included here.

Process Input

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Process Input	Rilginege	I sumplied to a Process Sten Instance	Process Input might include information that is used to produce outputs (e.g. a Data Set), to control specific parameters of the process, and as reference to guide the process (e.g. a Code List).	

Attributes

None.

Process Input Specification

Class	Group	Definition	Explanatory Text	Synonyms
Process Input Specification	Business	set of information classes that function as inputs to a <i>Process Design</i>	The Process Input Specification enumerates the Process Inputs required at the time a Process Design is executed. For example, if five different Process Inputs are required, the Process Input Specification will describe each of the five inputs. For each required Process Input the Process Input Specification will record the type of information class (based on GSIM) which will be used as the Process Input (example types might be a Data Set or a Statistical Classification). The Process Input to be provided at the time of Process Step execution will then be a specific instance of the type of information classspecified by the Process Input Specification. For example, if a Process Input Specification requires a Data Set then the corresponding Process Input provided at the time of Process Step execution will be a particular Data Set.	

Name	Description	Cardinality	Value Type
Process Input Type	E.g., Parameter Input, Process Support Input, CoreInput.	1*	ControlledVocabulary

Attributes inherited from super-type(s) are not included here.

Process Method

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Process Method	Business	methodology which will be	The methodology specified by a <i>Process Method</i> is independent from any choice of technologies and/or other tools which will be used to apply that technique in a particular instance. The definition of the methodology may, however, intrinsically require the application of specific <i>Rules</i> (for example, mathematical or logical formulas). A <i>Process Method</i> describes a particular method for performing a <i>Process Step</i> .	

Attributes

Attributes inherited from super-type(s) are not included here.

Process Metric

Class	Group	Definition	Explanatory Text	Synonyms
Process Metric	Business	Process Output summarising some aspect or property of the execution	A <i>Process Metric</i> is a sub-type of <i>Process Output</i> which records information about the execution of a <i>Process Step</i> . For example, how long it took to complete execution of the <i>Process Step</i> and what percentage of records in the <i>Core Input</i> was updated by the <i>Process Step</i> to produce the <i>Core Output</i> . One purpose for a <i>Process Metric</i> may be to provide a quality measure related to the <i>Core Output</i> . For example, a <i>Process Step</i> with the <i>Business Function</i> of imputing missing values is likely to result, as its <i>Core Output</i> , in a <i>Data Set</i> where values that were missing previously have been imputed. Statistical quality measures, captured as <i>Process Metrics</i> for that <i>Process Step</i> may include a measure of how many records were imputed, and a measure of how much difference, statistically, the imputed values make to the dataset overall which can be also used as a part of a quality report associated with the Data Set produced. Another purpose for a	

Class	Group	Definition	Explanatory Text	Synonyms
			Process Metric may be to measure an aspect of the Process Step which is not directly related to the Core Output it produced. For example, a Process Metric may record the time taken to complete the Process Step or other forms of resource utilisation (for example, human and/or IT). Often these two kinds of Process Metrics will be used in combination when seeking to, for example, monitor and tune a statistical Business Process so its statistical outputs achieve the highest level of quality possible based on the time, staff and/or IT resources that are available.	

Attributes inherited from super-type(s) are not included here.

Process Output

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Process Output	Business	instance of an information class produced by a Process Step Instance		

Attributes

None.

Process Output Specification

Class	Group	Definition	Explanatory Text	Synonyms
Process Output Specification	Business	set of information classes that function as outputs of a <i>Process Design</i>	The <i>Process Output Specification</i> enumerates the <i>Process Outputs</i> that are expected to be produced at the time a <i>Process Design</i> is executed. For example, if five different <i>Process Outputs</i> are expected, the <i>Process Output Specification</i> will describe each of the five outputs. For each expected <i>Process Output</i> the <i>Process Output Specification</i> will record the type of information class (based on GSIM) which will be used as the <i>Process Output</i> (Example types might be a <i>Data Set</i> or a <i>Statistical Classification</i>). The <i>Process Output</i> to be provided at the time of <i>Process Step</i> execution will then be a specific instance of the type of information class specified by the <i>Process Output Specification</i> . For example, if a	

Class	Group	Definition	Explanatory Text	Synonyms
			Process Output Specification expects a Data Set then the corresponding Process Output provided at the time of Process Step execution will be a particular Data Set.	

Attributes inherited from super-type(s) are not included here.

Process Pattern

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Process Pattern	Business	recommended set of <i>Process Designs</i> that is highlighted for possible reuse	In a particular <i>Business Process</i> , some <i>Process Steps</i> may be unique to that <i>Business Process</i> while others may be applicable to other <i>Business Processes</i> . A <i>Process Pattern</i> can be seen as a reusable template. It is a means to accelerate design processes and to achieve sharing and reuse of design patterns which have proved effective. Reuse of <i>Process Patterns</i> can indicate the possibility to reuse related <i>Business Services</i> . By deciding to reuse a <i>Process Pattern</i> , a designer is actually reusing the pattern of <i>Process Designs</i> and <i>Process Control Designs</i> associated with that <i>Process Pattern</i> . They will receive a new instance of the <i>Process Designs</i> and <i>Process Control Designs</i> . If they then tailor their "instance" of the <i>Process Designs</i> and <i>Process Control Designs</i> to better meet their needs they will not change the definition of the reusable <i>Process Pattern</i> .	

Attributes

Attributes inherited from super-type(s) are not included here.

Process Step

Class	Group	Definition	Explanatory Text	Synonyms
Process Step	Business		A <i>Process Step</i> implements the <i>Process Design</i> specified in order to produce the outputs for which the <i>Process Step</i> was designed. Each <i>Process Step</i> is the use of a <i>Process Design</i> in a particular context (e.g., within a	

Class	Group	Definition	Explanatory Text	Synonyms
			specific Business Process). At the time of execution a Process Step Instance specifies the actual instances of input classes (for example, specific Data Sets, specific Conceptual Variables) to be supplied.	

Name	Description	Cardinality	Value Type
Is Comprehensive	Used to indicate whether this <i>Process Step</i> has sub- <i>Process Steps</i> .	01	Boolean

Attributes inherited from super-type(s) are not included here.

Process Step Instance

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Process Step Instance	Business	executed step in a <i>Business</i> Process specifying the actual inputs to and outputs from an occurrence of a <i>Process Step</i>	Each <i>Process Step</i> is the use of a <i>Process Design</i> in a particular context (e.g. within a specific <i>Business Process</i>). At the time of execution a <i>Process Step Instance</i> specifies the actual instances of input classes (for example, specific <i>Data Sets</i> , specific <i>Conceptual Variables</i>) to be supplied. Each <i>Process Step Instance</i> may produce unique results even though the <i>Process Step</i> remains constant. Even when the inputs remain the same, metrics such as the elapsed time to complete execution of the process step may vary from execution to execution. For this reason, each <i>Process Step Instance</i> details of inputs and outputs for that instance of the implementation of the <i>Process Step</i> . In this way it is possible to trace the flow of execution of a <i>Business Process</i> through all the <i>Process Steps</i> which were involved.	

Attributes

Process Support Input

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Process Support Input	Business	Process Input that influences the work performed by the Process Step Instance by providing additional information that affects the way Core Input is used	Process Support Input is a sub-type of Process Input. - Examples of Process Support Inputs could include: A technical or methodological handbook which can be used as a reference to assist the work performed (e.g. data editing, coding and classification) - An auxiliary Data Set which will influence imputation for, or editing of, a primary Data Set which has been submitted to the Process Step as the Core Input - A Provision Agreement which can be used as a supporting document - A repository or inventory of Process Methods or software system / architecture that are approved in the Organization that could be used as reference	

Attributes

Name	Description	Cardinality	Value Type
Data Type	The data type of the <i>Process Support Input</i> .	01	ControlledVocabulary
Value	The content of the <i>Process Support Input</i> .	01	String

Attributes inherited from super-type(s) are not included here.

Reference Document

Class	Group	Definition	Explanatory Text	Synonyms
Reference Document	Business	guide the Business	The examples of <i>Reference Documents</i> include: methodological handbooks, standards, legislation, corporate policies/guideline and best practices. <i>Reference Documents</i> are often unstructured and can be translated into <i>Rules</i> (e.g., quality requirements set by legislation can be written as a Rule). Note that documents can be physical (e.g., books) or electronical. The documents can be formal in terms of content (e.g., laws) or in terms of format (e.g., XML).	

Attributes inherited from super-type(s) are not included here.

Rule

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Rule	Rusiness	expression which can be evaluated to determine specific	Rules are of several types: they may be derived from methods to determine the control flow of a process when it is being designed and executed (e.g. imputation rules, edit rules); and they may be used to drive the logical flow of a questionnaire. There are many forms of Rules and their purpose, character and expression can vary greatly.	

Attributes

Name	Description	Cardinality	Value Type
Algorithm	The rule expressed as an algorithm.	01	String
Command Code	Structured information used by a system to process the instruction.	0*	String
Expression	The expression of the rule that is executed.	01	String
Is System Executable	Whether the rule is formatted to be executed by a system, or is only documentary.	01	Boolean
Rule Type	A type taken from a controlled vocabulary. For example: Input, Comparison, Imputation, Edit, Derivation, Recode	01	ControlledVocabulary

Attributes inherited from super-type(s) are not included here.

Statistical Need

Class	Group	Definition	Explanatory Text	Synonyms
Statistical Need	Riiginecc	requirement, request or other notification that will be	The <i>Statistical Need</i> is a proposed or imposed requirement, request or other notification as it has been received by a statistical organization. A <i>Statistical Need</i> is an expression of a	

Synonyms

Attributes

Class

Name	Description	Cardinality	Value Type
Is Met	Indicator for whether the request was met or unmet	01	Boolean

expresses the raw need in well-defined, structured terms.

including Environment Change or Information Request.

requirement, and is not necessarily well-defined. A related class - Change Definition - is

Once a *Statistical Need* has been received, the first step is to do the conceptual work to establish what it is we are trying to measure. The final output of this conceptual work is the

created when a Statistical Need is analysed by the organization. Change Definition

In some cases, the *Statistical Need* can result from the *Assessment* of the quality, efficiency, etc. of an existing process. A Statistical Need may be of a variety of types

Explanatory Text

Change Definition.

Attributes inherited from super-type(s) are not included here.

Statistical Programme

Group

Definition

organization.

considered by a statistical

Class	Group	Definition	Explanatory Text	Synonyms
Statistical Programme	Business	set of activities to produce statistics on a given <i>Universe</i> within the context of <i>Subject Fields</i>	The Statistical Programme provides the environmental context in which activities to produce statistics within a statistical organization are conducted. Statistical Programme will usually correspond to an ongoing activity such as a survey or output series covered by GSBPM phase 4-7. Some examples of Statistical Programme are: - Labour Force Survey - Multipurpose Household Survey - National Accounts - Demography - Overseas Arrivals and Departures Related to the Statistical Programme class, there are Statistical Programme Design and Statistical Programme Cycle classes that hold the detailed information about the design and conduct of the Business Process. A Statistical Programme could take as inputs other Statistical Programmes' outputs, e.g. national accounts. These activities are all carried out	

Class	Group	Definition	Explanatory Text	Synonyms
			to generate <i>Products</i> . In the case of the traditional approach, an organization has received a <i>Statistical Need</i> and produced a <i>Change Definition</i> and an approved <i>Business Case</i> . The <i>Business Case</i> will specify either a change to the design or methodology of an existing <i>Statistical Programme</i> , which will result in a new <i>Statistical Programme Design</i> ; or a change to one or more existing <i>Statistical Programmes</i> (for example, to add an additional objective to the <i>Statistical Programme</i>); or result in a new <i>Statistical Programme</i> being created. This does not include statistical support functions such as metadata management, data management (and other overarching GSBPM processes) and design functions. These activities are conducted as part of <i>Statistical Support Activity</i> .	

Name	Description	Cardinality	Value Type
Budget	Estimate of expenditure	01	Number
Date Ended	Date when the Statistical Programme was ended	01	Date
Date Initiated	Date when the Statistical Programme was initiated	01	Date
Legal Framework	Any legal framework (e.g., legal basis for the statistics to be produced by Statistical Programme)	0*	String
Legislative Reference	Any legislative materials, (e.g., parliamentary tabling documents)	0*	String
Source of Funding	Source of funding	01	String
Programme Status	The current condition of the programme (e.g., New Proposal, Under Development, Current, Completed, Cancelled, Transferred to Another Organization)	11	ControlledVocabulary

Statistical Programme Cycle

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Statistical Programme Cycle		iteration of a Statistical Programme for a given Population	A Statistical Programme Cycle documents the execution of an iteration of a Statistical Programme according to the associated Statistical Programme Design for a given Population (e.g., certain reference period, geography). It identifies the activities that are undertaken as a part of the cycle and the specific resources required and processes used and description of relevant methodological information used in this cycle defined by the Statistical Programme Design.	

Attributes

Name	Description	Cardinality	Value Type
Reference Period End	End date of the reference period	11	Date
Reference Period Start	Start date of the reference period	11	Date

Attributes inherited from super-type(s) are not included here.

Statistical Programme Design

Class	Group	Definition	Explanatory Text	Synonyms
Statistical Programme Design	Business	specification of the set of activities undertaken to investigate characteristics of a given <i>Population</i>	The Statistical Programme Design takes into account requirements such as resource, policy and compliance, specifies new processes, the use of existing ones and the description of relevant methodological information about that set of activities. It is a series of classes that provide the operational context in which a set of Business Processes is conducted. A simple example is where a Statistical Programme relates to a single survey, for example, the Labour Force Survey. The Statistical Programme will have a series of Statistical Programme Design classes that describe the methodology and design used throughout the life of the survey. When a methodological change is made to the survey, a new Statistical Programme Design is created to record the details of the new design.	

Name	Description	Cardinality	Value Type
Conceptual Framework	Description of the conceptual framework for the <i>Statistical Programme</i> (e.g., SNA).	0*	String
Status	Extensible redefined list (e.g., New Proposal, Under Development, Current, Completed, Cancelled, Transferred to Another Organization).	11	ControlledVocabulary

Attributes inherited from super-type(s) are not included here.

Statistical Support Activity

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Statistical Support Activity	Business	_	This type of activity will include such functions as metadata management, data management, methodological research, and design functions. These activities correspond to the overarching processes in the GSBPM, and Corporate Support in GAMSO, as well as activities to create new or change existing <i>Statistical Programmes</i> which are covered by GSBPM phase 1-3, thus creating or updating <i>Statistical Programme Designs</i> .	

Attributes

Name	Description	Cardinality	Value Type
Date Ended	Date when the Statistical Support Activity was ended.	01	Date
Date Initiated	Date when the Statistical Support Activity was initiated.	01	Date
Significant Events	A description of the real-world events which lead to the creation of the Statistical Support Activity.	01	String
Status	The current condition of the programme (e.g., New Proposal, Under Development, Current, Completed, Cancelled, Transferred to Another Organization).	11	ControlledVocabulary

3. Concepts Group

Category

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Category	•	measure a characteristic	Categories for the Concept of sex include: Male, FemaleNote: An extensional definition is a description of a Concept by enumerating all of its subordinate Concepts under one criterion or sub-division. For example - the Noble Gases (in the periodic table) are extensionally defined by the set of elements including Helium, Neon, Argon, Krypton, Xenon, Radon. (ISO 1087-1)	class

Attributes

Attributes inherited from super-type(s) are not included here.

Category Item

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Category Item	i Concem	• •	A <i>Category Item</i> contains the meaning of a <i>Category</i> without any associated representation. (For example: "Male")	

Attributes

Attributes inherited from super-type(s) are not included here.

Category Set

Class	Group	Definition	Explanatory Text	Synonyms
Category Set		type of <i>Node Set</i> for grouping <i>Categories</i> via <i>Category Items</i>	The Categories in a Category Set typically have no assigned Designations (Codes). For example: Male, Female	

Attributes inherited from super-type(s) are not included here.

Classification Family

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Classification Family	Concept	common Concept (e.g. economic activity)	Different classification databases may use different types of <i>Classification Families</i> and have different names for the families, as no standard has been agreed upon.	

Attributes

Attributes inherited from super-type(s) are not included here.

Classification Index

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Classification Index		ordered list (e.g. alphabetical, in code order) of Classification Index Entries	A Classification Index shows the relationship between text found in statistical data sources (responses to survey questionnaires, administrative records) and one or more Statistical Classifications. A Classification Index may be used to assign the codes for Classification Items to observations in acquisitions of statistical data. A Statistical Classification is a subtype of Node Set. The relationship between Statistical Classification and Classification Index can also be extended to include the other Node Set types - Code List and Category Set. A Classification Index can relate to one particular or to several Statistical Classifications.	

Attributes

Name	Description	Cardinality	Value Type
Coding Instructions	Additional information which drives the coding process for all entries in a <i>Classification Index</i> .	0*	String

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Name	•	Cardinality	Value Type
Corrections	Summary description of corrections, which have occurred within the <i>Classification Index</i> . Corrections include changing the item code associated with a <i>Classification Index Entry</i> .	01	String
Languages Available	A <i>Classification Index</i> can exist in several languages. Indicates the languages available. If a <i>Classification Index</i> exists in several languages, the number of entries in each language may be different, as the number of terms describing the same phenomenon can change from one language to another. However, the same phenomena should be described in each language.	0*	String

Attributes inherited from super-type(s) are not included here.

Classification Index Entry

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Classification Index Entry	Concent	economic activity or an occupational title) describing a type of object/unit or object property	A Classification Item is a subtype of Node. The relationship between Classification Item and Classification Index Entry can also be extended to include the other Node types - Code Item and Category Item. Each Classification Index Entry typically refers to one item of the Statistical Classification. Although a Classification Index Entry may be associated with a Classification Item at any Level of a Statistical Classification, Classification Index Entries are normally associated with items at the lowest Level.	

Attributes

Name	Description	Cardinality	Value Type
Coding Instructions	Additional information which drives the coding process. Required when coding is dependent upon one or many other factors.	0*	String
Text	Text describing the type of object/unit or object property.	1*	String

Classification Item

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Classification Item		Category at a certain Level with a	A Classification Item defines the content and borders of the associated Category. A Unit can be classified to one and only one item at each Level of a Statistical Classification. Categories are used to create sub-populations and must be mutually exclusive when contained into a Statistical Classification.	

Attributes

Name	Description		Value Type
Case Laws	Refers to identifiers of one or more case law rulings related to the <i>Classification Item</i> .		MultilingualText
Case Law Descriptions	Reters to descriptions of the case laws		MultilingualText
Case Law Dates	se Law Dates Refers to date of case laws.		Date
Generated	enerated Indicates whether or not the item has been generated to make the level to which it belongs complete.		Boolean
Linked Items	Items of other classification versions or variants with which the item is linked, either as source or target, through <i>Correspondence Tables</i> .	0*	String

Attributes inherited from super-type(s) are not included here.

Classification Series

Class	Group	Definition	Explanatory Text	Synonyms
Classification Series	Concept	· · · · · · · · · · · · · · · · · · ·	Typically, these <i>Statistical Classifications</i> have the same name (e.g., ISIC or ISCO).	

Name	Description	Cardinality	Value Type
Context	Classification Series can be designed in a specific context.	01	String
Keywords	A Classification Series can be associated with one or a number of keywords.	0*	String
Objects/Units Classified	A <i>Classification Series</i> is designed to classify a specific type of object/unit according to a specific attribute.	11	String
Subject Areas	Areas of statistics in which the Classification Series is implemented.	11	String

Attributes inherited from super-type(s) are not included here.

Code

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Code	Concept	Designation for a Category	Codes are unique within their Code List. Example: M (Male) F (Female).	

Attributes

Attributes inherited from super-type(s) are not included here.

Code Item

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Code Item	Concept	type of Node exclusive to a Code List that combines a	A <i>Code Item</i> combines the meaning of the included <i>Category</i> with a <i>Code</i> representation. <i>Codes</i> are unique within their <i>Code List</i> . Example: M (Male) F (Female).	

Attributes

Code List

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Code List			Similar <i>Code Lists</i> can be grouped together (via the "relates to" relationship inherited from <i>Node Set</i>). A <i>Code List</i> provides a predefined set of permissible values for an <i>Enumerated Value Domain</i>	

Attributes

Attributes inherited from super-type(s) are not included here.

Concept

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Concept	Concept	unit of thought differentiated by characteristics		

Attributes

Name	Description	Cardinality	Value Type
Definition	Representation of a <i>Concept</i> by a descriptive statement which serves to differentiate it from related <i>Concepts</i> .	1*	MultilingualText

Attributes inherited from super-type(s) are not included here.

Concept System

Class	Group	Definition	Explanatory Text	Synonyms
Concept System	Concept	1	Here are 2 examples 1) Concept of Sex: Male, Female, Other 2) ISIC (the list is too long to write down)	

Attributes inherited from super-type(s) are not included here.

Conceptual Domain

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Conceptual Domain	Concept	set of valid Concepts	The Concepts can be described by either enumeration or by an expression.	

Attributes

Name	Description	Cardinality	Value Type
Sentinel	If true, the domain is sentinel (i.e. values used to represent a state in the processing life-cycle e.g. missing data), otherwise the domain is substantive (i.e. values used to represent an observation of some <i>Unit</i> of interest).	11	Boolean

Attributes inherited from super-type(s) are not included here.

Conceptual Variable

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Conceptual Variable	Concept	use of a Concept as a characteristic of <i>Unit Type</i> intended to be observed	The <i>Conceptual Variable</i> combines the meaning of a <i>Concept</i> with a <i>Unit Type</i> , to define the characteristic that is to be measured. Here are 3 examples: - Sex of person - Number of employees - Value of production	

Attributes

Correspondence Table

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Correspondence Table	Concept	set of Maps between the Classification Items of two Statistical Classifications	These are typically: two versions from the same Classification Series; Statistical Classifications from different Classification Series; a variant and the version on which it is based; or, different versions of a variant. In the first and last examples, the Correspondence Table facilitates comparability over time. Correspondence relationships are shown in both directions. A Statistical Classification is a subtype of Node Set. The relationship between Statistical Classification and Correspondence Table can also be extended to include the other Node Sets - Code List and Category Set.	

Attributes

Name	Description	Cardinality	Value Type
Floating	If the source and/or target <i>Statistical Classifications</i> of a correspondence table are floating classifications, the date of the correspondence table must be noted. The correspondence table expresses the relationships between the two <i>Statistical Classifications</i> as they existed on the date specified in the table.	01	String
Relationship Type	A correspondence can define a 1:1, 1:N, N:1 or M:N relationship between source and target items.	01	String
Source Level	The correspondence is normally restricted to a certain Level in the source <i>Statistical Classification</i> . In this case, target items are assigned only to source items on the given level. If no level is indicated, target items can be assigned to any level of the source <i>Statistical Classification</i> .	01	String
Target Level	The correspondence is normally restricted to a certain Level in the target <i>Statistical Classification</i> . In this case, source items are assigned only to target items on the given level. If no level is indicated, source items can be assigned to any level of the target <i>Statistical Classification</i> .		String

Datum

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Datum	Concept	value	A <i>Datum</i> is the actual instance of data that was acquired or derived. It is the value which populates a <i>Data Point</i> . A <i>Datum</i> is the value found in a cell of a table.	

Attributes

None.

Described Conceptual Domain

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Described Conceptual Domain	Concept	Conceptual Domain defined by an expression	For example: all real numbers between 0 and 1. Described Conceptual Domain is a synonym for non-enumerated conceptual domain (source: GSIM)	Non-enumerated conceptual domain

Attributes

Attributes inherited from super-type(s) are not included here.

Described Value Domain

Class	Group	Definition	Explanatory Text	Synonyms
Described Value Domain	Concept	1	For example: all real decimal numbers between 0 and 1. Described Value Domain is a synonym for non-enumerated value domain (source: GSIM)	

Name	Description	Cardinality	Value Type
Data Type		11	String

Attributes inherited from super-type(s) are not included here.

Designation

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Designation	Concept	association of a <i>Concept</i> with a sign that denotes it	Designation is the name given to an object for identification.	

Attributes

Attributes inherited from super-type(s) are not included here.

Enumerated Conceptual Domain

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Enumerated Conceptual Domain	Concept	Conceptual Domain expressed as a list of Categories	For example, the Sex <i>Categories</i> : 'Male' and 'Female'	

Attributes

Attributes inherited from super-type(s) are not included here.

Enumerated Value Domain

Class	Group	Definition	Explanatory Text	Synonyms
Enumerated Value Domain	i i onceni	Value Domain expressed as a list of Categories and associated Codes	Example - Sex Codes <m, male="">; <f, female="">; <o, other="">.</o,></f,></m,>	

Attributes inherited from super-type(s) are not included here.

Instance Variable

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Instance Variable	Concept	use of a Represented Variable within a Data Set	The <i>Instance Variable</i> is used to describe actual instances of data that have been acquired. Here are 3 examples: 1) Gender: Dan Gillman has gender <m, male="">, Arofan Gregory has gender<m, male="">, etc. 2) Number of employees: Microsoft has 90,000 employees; IBM has 433,000 employees, etc. 3) Endowment: Johns Hopkins has endowment of <3, \$1,000,000 and above>, Yale has endowment of <3, \$1,000,000 and above>, etc.It may include information about the source of the data.</m,></m,>	

Attributes

Attributes inherited from super-type(s) are not included here.

Level

Definition

	Class	Group	Definition	Explanatory Text	Synonyms
]	Level		set of <i>Nodes</i> in a hierarchical <i>Node Set</i> in which 1) each <i>Node</i> in the set is the same number of parent-child steps away from the root <i>Node</i> in the hierarchy, and 2) the set is defined by a unifying <i>Concept</i>		

Attributes

Name	Description	Cardinality	Value Type
Code Structure	Indicates how the code is constructed of numbers, letters and separators.	01	String

Name	Description	Cardinality	Value Type
Code Type	ode Type Indicates whether the item code at the Level is alphabetical, numerical or alphanumerical.		ControlledVocabulary
Dummy Code			String
Items	An ordered list of the Categories (Classification Items) that constitute the Level.		MultilingualText
Level Number	The number associated with the <i>Level</i> . <i>Levels</i> are numbered consecutively starting with level 1 at the highest (most aggregated) <i>Level</i> .	01	Number

Attributes inherited from super-type(s) are not included here.

Map

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Map	Concept	expression of the relation between a Classification Item in a source Statistical Classification and a corresponding Classification Item in the target Statistical Classification	The Map should specify whether the relationship between the two Classification Items is partial or complete. Depending on the relationship type of the Correspondence Table, there may be several Maps for a single source or target item. The use of <i>Correspondence Tables</i> and <i>Maps</i> can be extended to include all types of <i>Node</i> and <i>Node Set</i> . This means that a <i>Correspondence Table</i> could map between the items of <i>Statistical Classifications</i> , <i>Code Lists</i> or <i>Category Sets</i> .	

Attributes

Attributes inherited from super-type(s) are not included here.

Measurement Type

Class	Group	Definition	Explanatory Text	Synonyms
Measurement Type	Concept	defines the type of a	converted into each other. A Measurement Type can have a standard Measurement Unit, which can be used for conversion between different	dimensionality(See ISO/IEC 11179-1 Ed 3, section 3.3.15, for a good explanation of dimensionality.)

Class	Group	Definition	Explanatory Text	Synonyms
			for a given <i>Measurement Type</i> e.g. currency. Each <i>Measurement Type</i> has as a standard at most one <i>Measurement Unit</i> .	

Attributes inherited from super-type(s) are not included here.

Measurement Unit

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Measurement Unit	Concepts	metric for a measurement in terms of an official	Measurement Unit is a definite magnitude of a quantity, defined and adopted by convention or by law, that is used as a standard for measurement of the same kind of quantity. Measurement Units can be based on different Measurement Types such as weight, height, currency, duration etc. Measurement Units can be transformed into one another (e.g. kilometres into metres) if they refer to the same Measurement Type (e.g. length). The conversion rule attribute can be used to include a multiplicative factor e.g. the non-standard Measurement Unit '1000 kg' = 1000 x the standard Measurement Unit 'kg'.	

Attributes

Name	Description	Cardinality	Value Type
Abbreviation	Abbreviation for the <i>Measurement Unit</i> e.g. kg for kilograms	0*	String
Conversion Rule	Rule for conversion to the standard Measurement Unit, if this exists.	01	String

Node 5

Definition

Class	Group	Definition	Explanatory Text	Synonyms
Node	Concepts	~ ·	A <i>Node</i> is created as a <i>Category</i> , <i>Code</i> or <i>Classification Item</i> for the purpose of defining the situation in which the <i>Category</i> is being used.	

Attributes

Name	Description	Cardinality	Value Type
~~~	To define the parent/child relationship between Nodes, it tells us whether we are applying the part whole relationship, or the super/sub type relationships.	01	String

Attributes inherited from super-type(s) are not included here.

# **Node Set**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Node Set	Concept	set of <i>Nodes</i>	Node Set is a kind of Concept System. Here are 2 examples:  1) Sex Categories  - Male  - Female  - Other  2) Sex Codes  - <m, male="">  - <f, female="">  - <o, other=""></o,></f,></m,>	

## Attributes

# Population

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Measurement Unit	I Oncents	total membership of a defined	A <i>Population</i> is used to describe the total membership of a group of people, objects or events based on characteristics, e.g. time and geographic boundaries. Here are 3 examples:  - Adult persons in the Europe on 13 November 1956  - Computer companies in the US at the end of 2012  - Universities in the world on 1 January 2023	

## Attributes

Name	Description	Cardinality	Value Type
Geography	The geographical area to which the population is associated.	01	String
Reference Period	The time period to which the population is associated.	01	Date

Attributes inherited from super-type(s) are not included here.

# Represented Variable

Class	Group	Definition	<b>Explanatory Text</b>	Synonyms
Represented Variable	Concepts	combination of a characteristic of a population to be measured and how that measure will be represented	The measure applies to quantitative, categorical, and descriptive <i>Conceptual Variable</i> . Examples: The pair (Number of Employees, Integer), where "Number of Employees" is the characteristic of the population ( <i>Conceptual Variable</i> ) and "Integer" is how that measure will be represented ( <i>Substantive Value Domain</i> ). <i>If the Conceptual Variable is "Industry" and the Substantive Value Domain</i> is "Level 1 of NACE 2007", the pair is (Industry, NACE 2007 - Level 1). The <i>Represented Variable</i> "Sex of Person [1,2,3]", has the <i>Conceptual Variable</i> (Sex of Person) and the representation (1=Male, 2=Female, 3=Other).	

Attributes inherited from super-type(s) are not included here.

## **Sentinel Value Domain**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Sentinel Value Domain	Concepts	Value Domain containing sentinel values, i.e. processing-related special values	A sentinel value is one used for processing and with no subject matter content, such as missing or refused. Sentinel Value Domains can be enumerated (listed) or described. A Value Domain expressed as a list of Categories for sentinel values or a description thereof. The scope and the meaning of the possible values are defined within the frame of the Conceptual Domain that the Sentinel Value Domain is associated with. Separating the sentinel values from the substantive ones allows a large reduction in the number of Value Domains, and thus Represented Variables and Instance Variables, that need to be maintained. Use of generic codes is recommended for Concepts which appear in many, if not, all Code Lists, e.g. <s_x, unspecified="">, <s_z, applicable="" not="">, <s_r, refusal="">, <s_u, unknown=""></s_u,></s_r,></s_z,></s_x,>	

### Attributes

Attributes inherited from super-type(s) are not included here.

## **Statistical Classification**

Class	Group	Definition	Explanatory Text	Synonyms
Statistical Classification	1	hierarchically organized set of mutually exclusive and jointly exhaustive <i>Categories</i> that share the same or similar characteristics, used for meaningfully grouping the objects or units in the population of interest	The <i>Categories</i> are defined with reference to one or more characteristics of a particular population of units of observation. A <i>Statistical Classification</i> may have a flat, linear structure or may be hierarchically structured, such that all <i>Categories</i> at lower <i>Levels</i> are sub- <i>Categories</i> of <i>Categories</i> at the next <i>Level</i> up. <i>Categories</i> in <i>Statistical Classifications</i> are represented in the information model as <i>Classification Items</i> .	

Name	Description	Cardinality	Value Type
Changes from Base Statistical Classification	Describes the relationship between the variant and its base <i>Statistical Classification</i> , including regroupings, aggregations added and extensions.	01	MultilingualText
Changes from Previous Version or Update	A summary description of the nature and content of changes from the preceding version or update. Specific changes are recorded in the <i>Classification Item</i> object under the "Changes from previous version and updates" attribute.	01	MultilingualText
Copyright	Statistical Classifications may have restricted copyrights. Such Statistical Classifications might be excluded from downloading. Notes the copyright statement that should be displayed in official publications to indicate the copyright owner.	0*	String
Current	Indicates whether or not the Statistical Classification is currently valid.	01	Boolean
Derived From	A Statistical Classification can be derived from one of the classification versions of another Classification Series. The derived Statistical Classification can either inherit the structure of the classification version from which it is derived, usually adding more detail, or use a large part of its Classification Items, rearranging them in a different structure. Indicates the classification version from which the actual Statistical Classification is derived.	01	String
Floating	Indicates if the <i>Statistical Classification</i> is a floating classification. In a floating statistical classification, a validity period should be defined for all <i>Classification Items</i> which will allow the display of the item structure and content at different points of time.	01	Boolean
Introduction	The introduction provides a detailed description of the <i>Statistical Classification</i> , the background for its creation or variant, the classification variable and objects/units classified, classification rules etc.	01	MultilingualText
Languages Available	A <i>Statistical Classification</i> can exist in one or several languages. Indicates the languages available, whether the version is completely or partially translated, and which part is available in which language.	0*	String
Legal Base	Indicates that the <i>Statistical Classification</i> is covered by a legal act or by some other formal agreement.	0*	MultilingualText
Name Types	A list of the defined types of alternative item names available for the <i>Statistical Classification</i> . Each name type refers to a list of alternative item names.	0*	ControlledVocabulary

Name	Description	Cardinality	Value Type
Predecessor	For those Statistical Classifications that are versions or updates, notes the preceding Statistical Classification of which the actual Statistical Classification is the successor.		String
Successor	Notes the Statistical Classification that superceded the actual Statistical Classification.	01	String
Update	Indicates if the Statistical Classification is an update.		Boolean
Updates Possible	Indicates whether or not updates are allowed within the classification version i.e. without leading to a new version. Indicate here what structural changes, if any, are permissable within a version. Note whether <i>Classification Items</i> can be added to the structure and whether they can be revalidated or invalidated. Such changes are more likely to be permissable in floating classifications. Also indicate whether changes to such things as <i>Classification Item</i> names and explanatory notes that do not involve structural changes are permissible within a version.	01	Boolean

Attributes inherited from super-type(s) are not included here.

# **Subject Field**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Subject Field	Concept	field of knowledge under which a set of <i>Concepts</i> and their <i>Designations</i> is used	For example, labour market, environmental expenditure, tourism, etc.	subject area, theme

## Attributes

Attributes inherited from super-type(s) are not included here.

## **Substantive Value Domain**

Class	Group	Definition	Explanatory Text	Synonyms
Substantive Value Domain	Loncent	substantive values, where a substantive value is subject	A substantive value is one representing subject matter content, such as <f, female=""> in a gender classification. The scope and the meaning of the possible values are defined within the frame of the <i>Conceptual Domain</i> that the <i>Substantive Value Domain</i> is associated with. Example: &lt;0, Pre-primary&gt;, &lt;1, Primary&gt;, &lt;2, Lower secondary&gt;, &lt;3,</f,>	

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**Synonyms** 

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Attributes inherited from super-type(s) are not included here.

Definition

Group

### Unit

Class

## Definition

Class	Group	Definition	<b>Explanatory Text</b>	Synonyms
Unit	Concept	entity for which information is sought and for which statistics are ultimately compiled	Here are 3 examples: - Individual US person (e.g., Arofan Gregory, Dan Gillman, Barack Obama, etc.) - Individual US computer companies (e.g., Microsoft, Apple, IBM, etc.) - Individual US universities (e.g., Johns Hopkins, University of Maryland, Yale, etc.)	

Upper secondary>, <4, Post-secondary non-tertiary>, <5, First stage of tertiary education>, <6, Second stage of tertiary education> where the scope and meaning of the values are defined within *Categories* for levels of education.

**Explanatory Text** 

#### Attributes

Attributes inherited from super-type(s) are not included here.

## **Unit Type**

Class	Group	Definition	Explanatory Text	Synonyms
Unit Type		class or group of <i>Units</i> based on a single	A <i>Unit Type</i> is used to describe a class or group of <i>Units</i> based on a single characteristic, but with no specification of time and geography. For example, the <i>Unit Type</i> of "Person" groups together a set of <i>Units</i> based on the characteristic that they are 'Persons'. It concerns not only <i>Unit Types</i> used in dissemination, but anywhere in the statistical process. E.g. using administrative data might involve the use of a fiscal unit.	Object class (ISO 11179)

Attributes inherited from super-type(s) are not included here.

## Universe

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Universe		but not by time or	The description statement of a <i>Universe</i> is generally stated in inclusive terms such as "All persons with a university degree". Occasionally a <i>Universe</i> is defined by what it excludes, i.e., "All persons except those with a university degree". In both cases, adding the condition of the university degree specializes persons, which is a Unit Type.	

### Attributes

Attributes inherited from super-type(s) are not included here.

## **Value Domain**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Value Domain	Concept	set of permissible values for a Conceptual Variable	The values can be described by enumeration or by an expression.	

## Attributes

# 4. Exchange Group

### **Data Harvest**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Data Harvest	Exchange	•	Examples of <i>Data Harvest</i> include web scraper, API (e.g., to acquire data from administrative sources), scanner, sensor, etc.	

#### Attributes

Attributes inherited from super-type(s) are not included here.

## **Dissemination Instrument**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Dissemination Instrument	Exchange	Exchange Instrument to disseminate information	Examples include: API or web services for data dissemination	

#### Attributes

Attributes inherited from super-type(s) are not included here.

# **Exchange Instrument**

Class	Group	Definition	Explanatory Text	Synonyms
Exchange Instrument	Exchange	concrete and usable tool to exchange information	The <i>Exchange Instrument</i> is a tool to receive or send information and is used for external and internal purposes. Different <i>Exchange Instruments</i> are used for data acquisition and dissemination. An example of <i>Exchange instrument</i> for receiving information is <i>Questionnaire</i> . An example of <i>Exchange Instrument</i> for sending information is <i>Dissemination Instrument</i> . Additional <i>Exchange Instruments</i> can be added to the model as needed by individual organizations.	

Name	Description	Cardinality	Value Type
Direction	Direction of the Exchange Instrument: acquire or disseminate.	11	String

Attributes inherited from super-type(s) are not included here.

# **Exchange Specification**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Exchange Specification	Exchange	specifying the design of the	GSBPM Phase 2 (Design) results in an <i>Exchange Specification</i> that specifies the design of the data acquisition or dissemination instruments (e.g., <i>Questionnaire</i> , web page). In GSBPM Phase 3 (Build), these instruments are built based on the tools.	

### Attributes

Attributes inherited from super-type(s) are not included here.

## **Information Consumer**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Information Consumer		Intormation	The <i>Information Consumer</i> accesses a set of information in a <i>Product</i> that is made available via a <i>Dissemination Instrument</i> . The <i>Information Consumer</i> subscribes to the <i>Provision Agreement</i> , which sets out conditions of access. The <i>Information Consumer</i> can be defined in a broad sense with a persona concept (group of Individuals) without specific details.	

### Attributes

## **Information Provider**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Information Provider	Exchange		An <i>Information Provider</i> possesses sets of information (that it has acquired, for example by collecting or purchasing it) and is willing to supply that information (data or referential metadata) to the statistical organization. The two parties use a <i>Provision Agreement</i> to agree on the <i>Data Structure</i> and <i>Referential Metadata Structure</i> of the data to be exchanged via an <i>Exchange Instrument</i> .	

### Attributes

Attributes inherited from super-type(s) are not included here.

# **Instance Question**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Instance Question	Exchange	l narticiliar <i>i niestionnaire</i>	The Instance Question is the use of a Question in a particular Questionnaire Component.  This also includes the use of the Question in a Question Block, which is a particular type of Questionnaire Component.	

## Attributes

Name	Description		Value Type
Question Purpose	A description of the purpose of the question, whether the question has a specific expected function.	01	MultilingualText
Question Text	The text which describes the information which is to be obtained.	11	MultilingualText

# **Instance Question Block**

## **Definition**

Class	Group	Definition	Explanatory Text	Synonyms
Instance Question Block		i a nariiciliar <i>i niosiionnoiro</i>	The Instance Question Block is the use of a Question Block in a particular Questionnaire Component. This also includes the use of a Question Block in another Question Block, as it is a particular type of Questionnaire Component.	

### Attributes

Attributes inherited from super-type(s) are not included here.

### **Instance Statement**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Instance Statement	Exchange	use of a Statement in a particular Questionnaire or more specifically a Questionnaire Component	The <i>Instance Statement</i> is the use of a <i>Statement</i> in a particular <i>Questionnaire Component</i> . This also includes the use of the <i>Statement</i> in a <i>Question Block</i> , which is a particular type of <i>Questionnaire Component</i> .	

## Attributes

Name	Description	Cardinality	Value Type
Statement Text	The information, note, fact or instruction text making up the statement.	01	MultilingualText

Attributes inherited from super-type(s) are not included here.

# **Output Specification**

Class	Group	Definition	Explanatory Text	Synonyms
Output Specification	Exchange	•	The Output Specification specifies Products and uses the Presentations they contain. The Output Specification may be fully defined during the design process	

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Class	Group	Definition	Explanatory Text	Synonyms
		Information Consumers	(such as in a paper publication or a predefined web report), or may be a combination of designed specifications supplemented by user selections (such as in an online data query tool).	

Attributes inherited from super-type(s) are not included here.

# Presentation

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Presentation	Exchange	way data and referential metadata are presented	Presentations present data and referential metadata from Information Sets. Presentation can be used by an Output Specification to specify how Information Set in Product is presented.  Presentation can be in different forms; e.g. tables, graphs, structured data files. Examples:  - A table of data. Based on a DataSet, the related Data Structure is used to label the column and row headings for the table. The Data Set is used to populate the cells in the table. Reference metadata is used to populate footnotes and cell notes on the table. Confidentiality rules are applied to the Data Set to suppress any disclosive cells.  - A data file based on a standard (e.g. SDMX).  - A PDF document describing a Statistical Classification.  - Any structural metadata object expressed in a standard format (e.g. DDI 3.1 XML).  - A list of Products or services (e.g. a product catalogue or a web services description language (WSDL) file).  - A web page containing Statistical Classifications, descriptions of Conceptual Variables, etc.	

## Attributes

## Product 2

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Product	Exchange	11 0	A <i>Product</i> packages <i>Information Sets</i> for an <i>Information Consumer</i> . The <i>Product</i> is generated according to <i>Output Specifications</i> , which define how the information from the <i>Information Sets</i> are presented (via Presentations) to the <i>Information Consumer</i> . A <i>Provision Agreement</i> between the statistical organization and the <i>Information Consumer</i> governs the use of a <i>Product</i> by the <i>Information Consumer</i> . The <i>Provision Agreement</i> , which may be explicitly or implicitly agreed, provides the legal or other bases by which the two parties agree to exchange data. In many cases, dissemination <i>Provision Agreements</i> are implicit in the terms of use published by the statistical organization. For static <i>Products</i> (e.g. paper publications), specifications are predetermined. For dynamic <i>Products</i> , aspects of specification could be determined by the <i>Information Consumer</i> at run time. Both cases result in <i>Output Specifications</i> specifying <i>Information Set</i> data or referential metadata that will be included within the <i>Product</i> .	

### Attributes

Attributes inherited from super-type(s) are not included here.

# **Provision Agreement**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Provision Agreement	Exchange	legal or other basis by which two parties	A <i>Provision Agreement</i> between the statistical organization and the <i>Information Provider</i> (acquisition) or the <i>Information Consumer</i> (dissemination) governs the use of <i>Exchange Instrument</i> . The <i>Provision Agreement</i> , which may be explicitly or implicitly agreed, provides the legal or other basis by which the two parties agree to exchange data. The parties also use the <i>Provision Agreement</i> to agree the Information <i>Structure</i> of the information to be exchanged.	

## Attributes

# Question

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Question	Exchange	text used to elicit a response for a Conceptual Variable	A <i>Question</i> may be a single question used to obtain a response, or may be a multiple question, a construct which links multiple sub-questions, each with their own response. A <i>Question</i> also includes a relationship to the <i>Value Domain</i> to document the associated response criteria for the question. A single response question will have one <i>Value Domain</i> associated with it, while a 'multiple question' may have more than one <i>Value Domain</i> . A <i>Question</i> should be designed with reuse in mind, as it can be used in multiple <i>Questionnaires</i> . In a national implementation, <i>Question</i> could be further subtyped into:  - QuestionGrid, useful to model questions as grids/tables. It is actually a cube-like structure providing dimension information, labelling options, and response domains attached to one or more cells within the grid. For instance, a two-way table requesting to provide turnovers broken down by affiliates.  - QuestionItem, a simple question that is necessarily one dimensional. For example: "How old are you?"	Multiple Question

## Attributes

Name	Description	Cardinality	Value Type
Question Purpose	A description of the purpose of the question, whether the question has a specific expected function.	01	MultilingualText
Question Text	The text which describes the information which is to be obtained.	11	MultilingualText

Attributes inherited from super-type(s) are not included here.

# **Question Block**

Class	Group	Definition	Explanatory Text	Synonyms
Question Block	Exchange	set of <i>Questions, Statements</i> or instructions which are used together	A Question Block should ideally be designed for reuse. The <i>Question Block</i> is a type of <i>Questionnaire Component</i> . A statistical organization will often have a number of <i>Question Blocks</i> which they reuse in a number of <i>Questionnaires</i> . Examples of <i>Question Blocks</i> include:	

Class	Group	Definition	Explanatory Text	Synonyms
			<ul> <li>- Household <i>Question Block</i></li> <li>- Income <i>Question Block</i></li> <li>- Employment <i>Question Block</i></li> </ul>	

Attributes inherited from super-type(s) are not included here.

# Questionnaire

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Questionnaire	Exchange	observation Units	This is an example of a way statistical organizations acquire information (an <i>Exchange Instrument</i> ). Each collection mode (e.g. in-person, CAPI (Computer-assisted personal interviewing), online Questionnaire) should be interpreted as a new <i>Questionnaire</i> derived from the <i>Questionnaire Specification</i> . The <i>Questionnaire</i> is a tool in which data is obtained.	

## Attributes

Name	Description	Cardinality	Value Type
Media	Description of the kind of media conceived for the use of the <i>Questionnaire</i> (printed, electronic, etc.).	11	String
Support Artifacts	A list of devices, software programs, storage media, gadgets or other tools needed to support the use of the <i>Questionnaire</i> .	0*	String
Survey	Information on the survey which the <i>Questionnaire</i> will be used by.	0*	String

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# **Questionnaire Component**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Questionnaire Component	Exchange	record of the flow of a Questionnaire Specification and its use of Questions, Question Blocks and Statements	A Questionnaire Component defines the structure of the Questionnaire Specification, as a combination of Questions, Question Blocks and Statements. It is the class which groups together all the components of a Questionnaire. A Questionnaire Component is recursive, in that it can refer to other Questionnaire Components and accompanying Questionnaire Logic classes at a lower level. It is only at the top level where the Questionnaire Component links to the Questionnaire Specification.	

### Attributes

Name	Description	Cardinality	Value Type
Component Sequence	The order in which Instance Question, and Instance Statement appear in the Questionnaire Component.	0*	Number

Attributes inherited from super-type(s) are not included here.

# **Questionnaire Logic**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Questionnaire Logic	Exchange	management/control of the sequence of <i>Questions</i> , <i>Question Blocks</i> and <i>Statements</i> based on factors such as the current location, the response to the previous questions etc., invoking navigation and validation <i>Rules</i> to apply		Routing

## Attributes

Name	Description	Cardinality	Value Type
Routing Information	Routing information, which will also use responses from <i>Rule</i> .	1*	String

# **Questionnaire Specification**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Questionnaire Specification	Exchange	Exchange Specification for Questionnaire	This represents the complete questionnaire design, with a relationship to the top-level <i>Questionnaire Component</i> . There may be many different <i>Questionnaire Specifications</i> , for the same surveys, or tailored to individual observation <i>Units</i> (respondents) so that there would be a different <i>Questionnaire Specification</i> for each respondent. The design would also differ depending upon the specific mode of collection the <i>Questionnaire</i> is designed for.	

## Attributes

Attributes inherited from super-type(s) are not included here.

# Register

Class	Group	Definition	Explanatory Text	Synonyms
Register	Exchange	written and complete record containing regular entries of items and details on particular sets of objects	In official statistics, "statistical registers" and "adminisitrative registers" (registers maintained by other organizations, usually administrative data owners) are usually distinguished. In GSIM, the information class "Register" is used to describe both types because the attributes are more or less the same so from the information management point of view, they can be handled as one GSIM class. There is usually a purpose or authority for maintaining the <i>Register</i> and each object in the <i>Register</i> is described using a pre-defined set of characteristics. Examples include business and population registers as used by statistical organizations. Therefore, from statistical perspective, the <i>Register</i> can be interpreted as a set of objects for a given <i>Population</i> , updated on a regular basis, containing information on identification, accessibility of <i>Units</i> and other attributes. The <i>Register</i> contains the current and historical statuses of the <i>Population</i> and the causes, effects and sources of alterations in the <i>Population</i> . In order to better understand how the <i>Register</i> is used in GSIM, the use cases for the different scenarios are explained. These scenarios are:  - <i>Register as Information Set</i> maintained and regularly updated by the statistical organization.  - <i>Register as Information Set</i> for survey frames/sample frames.  - <i>Register as Information Set</i> for statistical <i>Products</i> .	

Cla	ss Group	Definition	Explanatory Text	Synonyms
			<ul> <li>- Register as Information Set used as direct or auxiliary information for the production of statistics.</li> <li>- Register as Information Set as a source of administrative information obtained usually from external organizations.</li> </ul>	

Attributes inherited from super-type(s) are not included here.

## Statement

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Statement	Exchange	report of facts in a Questionnaire		Interviewer InstructionInstruction

## Attributes

Name	Description	Cardinality	Value Type
Statement Text	The information, note, fact or instruction text making up the <i>Statement</i> .	01	MultilingualText

# 5. Structures Group

# **Attribute Component**

## Definition

Class	Group	Definition	<b>Explanatory Text</b>	Synonyms
Attribute Component		role given to a <i>Represented Variable</i> in the context of a <i>Data Structure</i> , which supplies information other than identification or measures	For example: - the embargo time (at which point the observation will be made publicly available) - the base period of the data in the series	

#### Attributes

Name	Description	Cardinality	Value Type
Is Mandatory	When there is an attribute in a <i>Dimensional Data Structure</i> , this sets a status to indicate whether it is mandatory or optional to include it in that particular dimensional <i>Data Set</i> .	01	Boolean
Attachment Level	The description of what <i>Level</i> a certain attachment is at. For example, in SDMX this could be Data Set, Observation, Series, Group.	01	ControlledVocabulary

Attributes inherited from super-type(s) are not included here.

## **Data Point**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Data Point			A <i>Data Point</i> is a cell or a placeholder for a value ( <i>Datum</i> ) it may contain (note that a data point could be empty). A field in a <i>Data Structure</i> which corresponds to, for example, a cell in a table. The <i>Data Point</i> is structural and distinct from the value (the <i>Datum</i> ) that it holds.	

## Attributes

## **Data Record**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Data Record		related to a given 1/nii or	For example (1212123, 48, American, United Kingdom) specifies the age (48) in years, the current citizenship (American), and the country of birth (United Kingdom) for a person with social security number 1212123. ** ** For the case of unit data, it can be structured by <i>Logical Record</i> .	

#### Attributes

Attributes inherited from super-type(s) are not included here.

## **Data Resource**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Data Resource	Structure	$\mathcal{E}$	Data Resources are collections of data. Data Resource is a specialization of an Information Resource.	

## Attributes

Attributes inherited from super-type(s) are not included here.

## **Data Set**

Class	Group	Definition	Explanatory Text	Synonyms
Data Set		organized collection of data	Data Sets could be used to organize a wide variety of content, including observation registers, time series, longitudinal data, survey data, rectangular data sets, event-history data, tables, data tables, registers, data cubes, data warehouses/marts and matrixes. An example of a population unit Data Set (microdata) could be a collection of three Data Records (1212123, 48, American, United Kingdom), (1212111, 38, Hungarian, United Kingdom), and (1212317, 51, Canadian, Mexico), each containing the social security number, age, citizenship and country of birth of an individual. An example of a population dimensional	Database, data file, file, table

Class	Group	Definition	Explanatory Text	Synonyms
			Data Set (aggregate) could be a collection of three entries (Mexico, 2021, 130.3), (United Kingdom, 2021, 67.33), and (Italy, 2022, 60.24), each containing the name of the country, year of interest and population of the country in millions.	

Namo	Description	Cardinality	Value Type
Type	Type of Data Set (e.g., unit Data Set, dimensional Data Set)	01	ControlledVocabulary

Attributes inherited from super-type(s) are not included here.

## **Data Structure**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Data Structure		structure of an organized collection of data ( <i>Data Set</i> )	The structure is described using <i>Data Structure Components</i> that can be either <i>Attribute Components, Identifier Components</i> or <i>Measure Components</i> . Examples for unit data include social security number, country of residence, age, citizenship, country of birth, where the social security number and the country of residence are both identifying components and the others are measured variables obtained directly or indirectly from the person ( <i>Unit</i> ).	

## Attributes

Attributes inherited from super-type(s) are not included here.

# **Data Structure Component**

Class	Group	Definition	Explanatory Text	Synonyms
Data Structure Component	Structure	Variable in the context of a	A Data Structure Component can be an Attribute Component, Measure Component or an Identifier Component Example of Attribute Component: publication status of an observation such as provisional, revised.	

Class	Group	Definition	Explanatory Text	Synonyms
			<ul> <li>Example of <i>Measure Component</i>: age and height of a person in a <i>Unit Data Set</i> or number of citizens and number of households in a country in a <i>Data Set</i> for multiple countries (dimensional <i>Data Set</i>).</li> <li>Example of <i>Identifier Component</i>: personal identification number of a Swedish citizen for unit data or the name of a country in the European Union for dimensional data.</li> </ul>	

Attributes inherited from super-type(s) are not included here.

## **Dimensional Data Structure**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Dimensional Data Structure	Structure	i structure of an organized	For example, (country, gender, number of citizens) where the country and gender are the <i>Identifier Component</i> and the number of citizens is a <i>Measure Component</i> .	

### Attributes

Name	Description	Cardinality	Value Type
Group	A composite association to one or more component lists.	0*	String

Attributes inherited from super-type(s) are not included here.

# **Identifier Component**

Class	Group	Definition	Explanatory Text	Synonyms
Identifier Component	Structure	in the context of a Data Structure to	An <i>Identifier Component</i> is a sub-class of <i>Data Structure Component</i> . The personal identification number of a Swedish citizen for unit data or the name of a country in the European Union for dimensional data.	

Name	Description	Cardinality	Value Type
Is Composite	Indicates if the key is composite.	01	Boolean
Is Unique	Indicates if the key is unique.	01	Boolean
Role	Specifies the type of id represented (entity, indicator, count, time, geography).	01	ControlledVocabulary

Attributes inherited from super-type(s) are not included here.

## **Information Resource**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Information Resource		abstract notion that is any organized collection of information	Statistical activity uses Information Resources to produce information. There currently are only two concrete sub-classes: <i>Data Resource</i> and <i>Referential Metadata Resource</i> . The <i>Information Resource</i> allows the model to be extended to other types of resource.	

## Attributes

Attributes inherited from super-type(s) are not included here.

## **Information Set**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Information Set	Structure	Lorganized collection	Statistical organizations acquire, process, analyze and disseminate <i>Information Sets</i> , which contain data ( <i>Data Sets</i> ), referential metadata ( <i>Referential Metadata Sets</i> ), or potentially other types of statistical content, which could be included in additional types of <i>Information Set</i> .	

## Attributes

### **Information Structure**

## **Definition**

Class	Group	Definition	<b>Explanatory Text</b>	Synonyms
Information Structure	Structure	describes the structure of an Information Set		

### Attributes

Attributes inherited from super-type(s) are not included here.

# **Logical Record**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Logical Record	Structure	instance of a <i>Data Record</i> which provides an additional	Logical Records provide an additional relationship on top of the <i>Data Structure</i> (e.g., an individual is a part of family, information from record linkage)	

## Attributes

Attributes inherited from super-type(s) are not included here.

# **Measure Component**

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Measure Component	Structure	observed/derived values for a particular <i>Unit</i>	A <i>Measure Component</i> is a sub-class of <i>Data Structure</i> Component. For example, age and height of a person in a <i>Unit Data Set</i> or number of citizens and number of households in a country in a <i>Data Set</i> for multiple countries (dimensional <i>Data Set</i> ).	

#### Attributes

# Record Relationship

## **Definition**

Class	Group	Definition	Explanatory Text	Synonyms
Record Relationship	Structure	between Logical Records within a	Record Relationship must have both a source Logical Record and a target Logical Record in order to define the relationship. Example: Relationship between a person and household Logical Records within a unit Data Set.	

### Attributes

Attributes inherited from super-type(s) are not included here.

## **Referential Metadata Attribute**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Referential Metadata Attribute	Structure	characteristic that describes or qualifies Referential Metadata Subject	A set of <i>Referential Metadata Attributes</i> is structured by <i>Referential Metadata Structure</i> to describe <i>Referential Metadata Subject</i> . Examples of <i>Referential Metadata Attributes</i> can be <i>Represented Variables</i> (e.g., "Accuracy", "Timeliness" when describing quality information) or other GSIM class (e.g., <i>Statistical Classification, Contact, Owner</i> ).	

### Attributes

Name	Description	Cardinality	Value Type
Is Container	Boolean indicating whether or not this attribute actually will contain a value when reported in a metadata set.	01	Boolean

## **Referential Metadata Content Item**

## **Definition**

Class	Group	Definition	<b>Explanatory Text</b>	Synonyms
Referential Metadata Content Item	Structure	<u> </u>	Referential Metadata Content Item can take different formats (e.g., text, number, value from a predefined codelist, table).	

#### Attributes

Attributes inherited from super-type(s) are not included here.

## Referential Metadata Resource

## **Definition**

Class	Group	Definition	Explanatory Text	Synonyms
Referential Metadata Resource	Structure	organized collection of stored information consisting of one or more <i>Referential Metadata Sets</i>	Referential Metadata Resources are collections of structured information. This class is a specialization of an Information Resource.	

#### Attributes

Attributes inherited from super-type(s) are not included here.

## **Referential Metadata Set**

## **Definition**

Class	Group	Definition	Explanatory Text	Synonyms
Referential Metadata Set			Each Referential Metadata Set uses a Referential Metadata Structure to define a structured list of Referential Metadata Attributes for a given Referential Metadata Subject Item.	

#### Attributes

## Referential Metadata Structure

## **Definition**

Class	Group	Definition	Explanatory Text	Synonyms
Referential Metadata Structure	Structures	structure of an organized collection of referential metadata	A Referential Metadata Structure defines a structured list of Referential Metadata Attributes for a given Referential Metadata Subject. Examples of Referential Metadata Structure include structures for describing quality information and methodologies information (e.g., ESS Standard for Quality Reports Structure) or characteristics of registers as well as a structure of documentation storing information necessarily for internal dataset management (e.g., GDPR status, existence of information on minor)).	Metadata Structure Definition

### Attributes

Attributes inherited from super-type(s) are not included here.

# Referential Metadata Subject

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Referential Metadata Subject	Structure		The Referential Metadata Subject identifies the subject of the metadata that can be reported using this Referential Metadata Structure. These subjects may be any GSIM information class on which organized set of metadata is needed, such as Statistical Program, Data Set, Questionnaire and Statistical Classification.	

#### Attributes

# Referential Metadata Subject Item

## Definition

Class	Group	Definition	Explanatory Text	Synonyms
Referential Metadata Subject Item		referential metadata is	Examples are an actual <i>Product</i> such as Balance of Payments and International Investment Position, Australia, June 2013, or a collection of <i>Data Points</i> such as the <i>Data Points</i> for a single region within a <i>Data Set</i> covering all regions for a country.	

### Attributes

Attributes inherited from super-type(s) are not included here.

## **Unit Data Structure**

# Definition

Class	Group	Definition	Explanatory Text	Synonyms
Unit Data Structure	Structure	organized	For example (social security number, country of residence, age, citizenship, country of birth) where the social security number and the country of residence are the identifying components ( <i>Identifier Component</i> ) and the others are measured variables obtained directly or indirectly from the person ( <i>Unit</i> ) and are <i>Measure Components</i> of the <i>Logical Record</i> .	File description, dataset description

### Attributes

Attributes inherited from super-type(s) are not included here.

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