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# TERMINOLOGY ON STATISTICAL METADATA



Geneva, 2000

#### **NOTE**

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### **PREFACE**

The methodological material "Terminology on Statistical Metadata" was prepared at the request of countries participating in the activities on Statistical Metadata organised by UN/ECE Statistical Division within the framework of the programme of work of the Conference of European Statisticians. It represents an extensive voluntary effort on the part of the participants of the UN/ECE Work Session on Statistical Metadata over many years.

The document was reviewed at the Work Session on Statistical Metadata in September 1999. National Statistical Offices of the UN/ECE member countries and Eurostat, the Food and Agriculture Organisation (FAO), International Labour Office (ILO), International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD), United Nations Industrial Organization (UNIDO), and United Nations Statistics Division (UNSD) participated in this meeting. The material reflects the outcome of the discussion on the document.

At its 2000 plenary session, the Conference of European Statisticians agreed to have this methodological material reproduced and distributed to interested statistical offices and other users.

#### **EXECUTIVE SUMMARY**

The aim of the publication "Terminology on Statistical Metadata" is to assist National and International Statistical Offices on problems dealing with the development and implementation of statistical metainformation systems. Although glossaries and lists of metadata terms related to statistical surveys, statistical production processes, and statistical data exist in statistical agencies, the terms related to the development and implementation of statistical metainformation systems as such are very often missing. This publication is an effort to overcome that deficiency.

Another problem in the existing statistical practice is the fact that many National Statistical Offices are developing metainformation systems independently. Therefore, each statistical agency, or group of agencies, develops its own set of terms (often in several languages) to describe and manage statistical metadata. This lack of standard terminology makes it difficult to share statistical metadata and, ultimately, statistical data across statistical agencies. One of the aims of the use of statistical metadata and the development of statistical metainformation system is allowing access, sharing, comparing, and understanding statistics across international boundaries. The development of standard terminology will greatly help this effort.

In general, terminology is a set of terms used to designate concepts related to a given subject area. Concepts are defined in some natural language. The natural language used and the structure in which the terms are organised are important considerations. In this publication the subject area is a statistical metainformation system. The publication was developed in English language only. Each term is an English word or phrase with a special associated definition. The terms are organized in the thesaurus structure with three relationship types used: related to; broader than; and narrower than. The common English meaning of these phrases defines the relationships.

The current version of the terminology defines over 230 terms related to the use of metadata in statistical data collection, processing and dissemination. The terms describe in more detail the following processes:

- metadata collection (as linked to data collection);
- storing, organising and searching metadata;
- metadata and metainformation system's functions (identification, location, retrieval, processing, analysis and interpretation function);
- metadata models and holdings;
- metadata administration and dissemination.

The scope of the terms in this publication is open to any changes and/or amendments. Its usefulness should be proved in statistical practice. Statistical offices and other interested agencies are encouraged to use this publication broadly and to send their comments, modifications, or proposals to the ECE secretariat. All correspondence regarding this terminology should be sent to: info.stat@unece.org.

#### administered component

Definition: Any object for which it is desirable to store, organize, and track

metadata.

broader: metadata
related: object system
narrower: conceptual domain
data element

data element concept

data set documentation emprise frame methodology object class product

product program property question questionnaire sample survey

survey instance

system technique universe value domain

## administrative data administrative records

Definition: The data collected by sources external to statistical offices

broader: statistical data related: metadata

statistical macrodata statistical metadata statistical microdata

narrower:

#### administrative survey

Definition: A statistical survey conducted by sources external to statistical offices

broader: survey related: census

combined survey

narrower:

#### aggregation process

Definition: The process that transforms sets of microlevel e-messages (statistical

microdata) into macrolevel messages (statistical macrodata)

broader: process

related: information process

sampling process collection process

narrower: aggregation process operator

aggregation process argument

aggregation process operator

Definition: A mathematical operator used for specification of aggregation

processes with statistical data

broader: aggregation process

related: aggregation process argument

narrower:

aggregation process argument

Definition: A variable used as a subscript to reference a set of statistical data that

enter an aggregation process

broader: aggregation process

related: aggregation process operator

narrower:

analytic function of statistical metainformation system (SMS)

Definition: A function embedded in a SMS that supports the user in analyzing the

data that have been retrieved

broader: function of statistical metainformation system

related: identification function of SMS

location function of SMS retrieval function of SMS processing function of SMS interpretation function of SMS

narrower:

attribute

Definition: An inherent characteristic of an object

broader:

related: characteristic

narrower: attribute of a statistical category

attribute of a statistical indicator

attribute of a statistical category

Definition: An attribute assigned to a statistical category

broader: statistical category

attribute

related:

narrower: basic indicator

attribute of a statistical indicator

Definition: An attribute assigned to a statistical indicator in accordance with the

rules of statistical methodology

broader: statistical indicator

attribute

related: name of a statistical indicator

value of a statistical indicator

narrower: measurement attribute

#### basic indicator

Definition: A statistical indicator that describes principal characteristics of a socio-

economic phenomenon or process. One basic indicator belongs to one or more statistical categories, but only one is considered the principal

category

broader: statistical indicator

related: elementary statistical indicator

derived statistical indicator

narrower:

business register

Definition: A register describing the properties of business establishments

broader: register

index(1)

related: household register

observation register population register territorial register

narrower:

census

Definition: A survey conducted on the full set of observation objects belonging to a

given population or universe

broader: survey

related: combined survey

emprise

narrower:

classification scheme

Definition: An arrangement or division of statistical objects into groups based on

characteristics that the objects have in common

broader: term

concept

related: enumerated value domain

terminology

narrower: thesaurus

taxonomy nomenclature code list glossary keyword

statistical typology

client of information system

Definition: An end-user outside the place where the information system is in

operation

broader: user

related: administrators

software artifacts

end-user

narrower:

code list

Definition: An ordered list of assigned codes and their meanings in the given

identification and/or classification scheme

broader: enumerated value domain

term concept

classification scheme

terminology

related: thesaurus

taxonomy nomenclature ontology glossary keyword

statistical typology

narrower:

#### collection of a statistical information

Definition: A function of statistical information system oriented to the gathering of

statistical information

broader: statistical information processing related: storage of a statistical information

transformation of a statistical information retrieval of a statistical information distribution of a statistical information user interaction with a statistical information

communication with a statistical information system

narrower:

combined survey

Definition: An arbitrary combination of other surveys

broader: survey related: emprise

narrower:

#### communication function of a statistical information system

Definition: A function of the statistical information system, that provides the tools

and facilities to its users for a long distance communication with the

system either in terminal mode or in network

broader: statistical information processing collection of a statistical information

storage of a statistical information transformation of a statistical information retrieval of a statistical information distribution of a statistical information

user interaction with a statistical information system

component data element

Definition: A data element included in an ordered set of related data elements to

form a composite data element.

broader: data element

derived data element

related: data element value

composite statistical indicator

Definition: A set of elementary statistical indicators related to a given phenomenon

or process or one of their aspects, described by one and only one category of statistical methodology. At least one of the attributes of a composite indicator has more than one occurrence (set, vector, matrix)

broader: statistical indicator

related: elementary statistical indicator

construction of a statistical indicator

narrower:

concept

Definition

A unit of thought

broader: related:

classification scheme

terminology thesaurus taxonomy nomenclature ontology glossary

statistical typology

narrower: term

conceptual domain

Definition The set value meanings of possible valid values of each data element

associated with a data element concept

broader:

related: data element concept

value domain

narrower: value meaning

construction of a statistical indicator

Definition: The process of selection, arrangement, and connection of attributes of a

statistical indicator in accordance with the methodology used in the

statistical system

broader: statistical indicator

related: identification of a statistical indicator

retrieval of a statistical indicator interpretation of a statistical indicator

narrower:

consultant

contact

Definition: A person who advises the end-user on relevance, availability, and cost

of data sources

broader: system administrator

related: data analyst market analyst

narrower:

Definition: An individual or organization that is knowledgeable about a subject

broader: administered component

related: statistical metainformation system

#### container schema

The schema that gives data-oriented meaning to a database by Definition:

descriptions of the fields, records, files, and structure of a physical

database

broader: schema related: metadata

content schema

narrower:

content

Definition: The part of the survey life cycle that is information concerning the

subject of the survey, i.e., what the universe is, a description of the data

collected, and a description of the resulting products

broader: life cycle of a survey

related: planning

design

data collection

survey data processing statistical data analysis data dissemination

narrower:

content schema

The schema that gives information-oriented meaning to database Definition:

content

broader: schema

related: metainformation

metadata

container schema

context

Definition: The system, database, standard document, or other environment in

which an object functions and has meaning.

broader:

related: metadata

statistical metadata

statistical metainformation

administered component narrower:

data

Definition: The physical representation of information in a manner suitable for

communication, interpretation, or processing by human beings or by

automatic means.

broader:

related: information narrower: statistical data metadata

data element

data administrator

Definition: A person responsible for managing the metadata about data elements

broader:

related: database administrator

survey designer

system administrator

system developer

narrower:

data analyst

Definition: A person responsible for relating multiple sources of statistical data and

performing data integration

broader: system designer related: data administrator system developer

narrower:

data collection

Definition: An activity of the survey life cycle for gathering data from respondents

and recording it for further processing

broader: life cycle of a survey

related: planning

design content

survey data processing statistical data analysis data dissemination

narrower: questionnaire

data confidentiality

Definition: A property of data, usually resulting from legislative measures, which

prevents it from unauthorized disclosure

broader: data protection data security

data dictionary

Definition: A description of a set of data elements usually associated with a single

data set

broader: information processing

data processing

survey

survey processing data gathering

related: data gathering

data capture

narrower: data collection

data dissemination

Definition: An activity in the survey life cycle to distribute or transmit statistical

data to its users

broader: life cycle of a survey

related: planning

design

data collection

survey data processing statistical data analysis

content

narrower:

#### data element

Definition: A smallest identifiable unit of data within a certain context for which

the definition, identification, permissible values, and other information is

specified by means of a set of attributes

A fundamental unit of data an organization manages

broader: data segment related: indicator

narrower: derived data element

component data element data element identifier data element value

data element concept

Definition: The human perception of a property of an object set, described

independently of any particular representation

broader: data segment related: indicator

narrower: derived data element

component data element data element identifier data element value

data element identifier

Definition: A label assigned to a data element for its unique identification

broader: data element related: data element value

narrower:

data element value

Definition: A value assigned to a data element from the set of permissible values

broader: data element value domain

related: component data element

data element identifier derived data element permissible value

narrower:

data file

Definition: An organized collection of related records of data

broader: data related: database

narrower:

data holding

Definition: A logical or physical set of data (e.g. database) stored together with its

description (e.g. schema)

broader:

related: database

database schema metadata system

metainformation system

data layer

Definition: The layer in the reference model for standardization in statistics that is

used to denote the set of objects related to statistical information

broader: data

related: metadata layer

narrower:

data processing

Definition: The operation performed on data in order to derive new information

according to a given set of rules

broader: data

related: information processing narrower: statistical data processing

data protection

Definition: An activity aimed at covering or shielding data from physical damage or

unauthorized access

broader:

related: data security narrower: data confidentiality

data security

Definition: The measures taken to prevent unauthorized access or use of data

broader: data processing

security

related: data confidentiality

narrower:

narrower:

data segment

Definition: A set of data elements comprising an identified logical or physical unit

of data

broader: data
related: data file
data record
database

data element

data set

Definition: Any organized collection of data

broader: data
related: data file
data record
database

narrower: data element

data type

Definition: A category used to classify the collection of letters, digits, and/or

symbols to depict values of a data element based upon the operations

that may be performed on the data element.

broader: data related: data file

data record database

narrower: data element

#### database

Definition: A data file or set of data with relationships expressed among data. Data

stored in the database are independent of any particular application

broader: data
related: data file
narrower: mirodatabase
macrodatabase

user interface to a database

database component

database administrator

Definition: A person responsible for the design, integrity, and functioning of a

database application

broader: system administrator related: data administrator

narrower:

database component

Definition: A constituent of data base containing data and metadata

broader: database system component

related: data element

narrower:

database schema

Definition: A logical description of the content, structure and constraints of a

database

broader: database

schema

related: metadata

data description container schema content schema statistical metadat

narrower: statistical metadata

datalogical statistical metainformation

database system

database management system

Definition: A generalized software package used to define, create and manage the

database

broader: system

related: data base management system

narrower:

database system component

Definition: A constituent part of data base system with common feature or

oriented on execution of particular function of the system. There are

two major components of the data base system, the data base

component and user interface component

broader: database

related:

narrower: data base component

user interface component

datalogical statistical metainformation

Definition: The statistical metainformation that concerns data representations and

technical solutions within the statistical information system

broader: statistical metainformation

related: infological statistical metainformation

narrower:

decision maker

Definition: A person responsible for making decisions within an object system of

an information system

broader: information system user

related: statistical information system users

statistical metainformation system users

narrower: client of information system

system administrator software artifact

decision making

Definition: The operation that is performed in order to choose between alternative

courses of action.

broader: information processing

related: decision makers

narrower:

derivation formula

Definition: An algorithm to compute data element values

broader: data element

related: component data element

data element value

narrower:

derivation type

Definition: Types of derivations for data elements.

broader: data element

related: component data element

data element value

narrower:

derived data element

Definition: A data element derived from other data elements using a mathematical,

logical, or other type of transformation, e.g. arithmetic formula,

composition, aggregation, etc.

broader: data element

related: component data element

data element value

narrower:

derived statistical indicator

Definition: A statistical indicator produced on the basis of other indicators by

processing their values according to a specified procedure

broader: statistical indicator related: basic indicator

statistical indicator

#### descriptive statistics

Definition: Information about the statistical characteristics of data.

broader: characteristics related: statistical data

narrower:

design

Definition: The part of the survey life cycle that is about the specifications,

procedures, processes and methods used in the development of the sample, questionnaire, estimation techniques, etc for a survey or

emprise.

broader: life cycle of a survey

technique

related: planning

content

data collection

survey data processing statistical data analysis data dissemination

narrower:

directive information

Definition: Information that is, by its nature, used in decision making for conceptual

or strategic types of decisions

broader: information

related: operative information

narrower:

distribution of a statistical information

Definition: A function of a statistical information system implemented to support

the dissemination of statistical information

broader: statistical information processing collection of a statistical information

storage of a statistical information transformation of a statistical information retrieval of a statistical information

user interaction with a statistical information system communication with a statistical information system

narrower:

documentation

Definition: Descriptive text used to define or describe an object, design,

specification, instructions, or procedure

broader: statistical information processing collection of a statistical information

storage of a statistical information transformation of a statistical information retrieval of a statistical information

user interaction with a statistical information system communication with a statistical information system

narrower

documentation type

Definition: List of types of documents, used to help classify documents

broader: documentation

related: narrower:

elementary message (e-message)

Definition: The simplest message built from references to objects, properties,

relations between objects, and times

broader: message

statistical message

related: elementary statistical indicator

narrower: relational e-message

property e-message macrolevel e-message microlevel e-message

elementary statistical indicator

Definition: The statistical indicator related to one phenomenon or process. The

elementary statistical indicator has one and only one value.

broader: statistical indicator

composite statistical indicator

related:

narrower:

emprise

Definition: An identifiable effort incorporating and combining statistical data from

more than one survey instance

broader:

related: survey

survey instance

narrower:

end-user

Definition: A person who receives statistical information with the aim to utilize it

for his practical purposes

broader: statistical information system user

related: client

narrower:

enumerated value domain

Definition: A value domain specified by a list of all permissible values

broader: value domain

related: non-enumerated value domain

narrower: permissible values

final observation register

Definition: An observation register created at the final stage of the life cycle of a

survey instance

broader: observation register

register

related: narrower: **format** 

Definition: A description of the order of a set of data elements used in a data set.

broader: data set

related: data dictionary narrower: data element

frame

Definition: All the identified objects based on a universe definition

broader: universe related: survey narrower: sample

free-text statistical metainformation

Definition: The statistical metainformation that describes the factual statistical data

in a non-formalized free text format

broader: statistical metainformation

related: qualitative statistical metainformation

quantitative statistical metainformation

narrower:

function of a statistical metainformation system (SMS)

Definition: A particular type of operation that is performed by the statistical

metainformation system

broader: statistical metainformation system related: statistical information system identification function of SMS

location function of SMS retrieval function of SMS processing function of SMS interpretation function of SMS analytic function of SMS

generic statistical message (GESMES)

Definition: A generic model of a statistical message

broader: message

related:...

narrower: statistical message

geographical code

Definition: A numeric code that is assigned to a geographical territory or

administrative unit in order to identify it in statistical data processing

broader: code list related: country code

narrower:

global statistical metadata

Definition: The statistical metadata that is of general use in statistical production or

originated in processing of final statistical outputs

broader: statistical metadata related: local statistical metadata

narrower:

glossary

Definition: A collection of terms

broader: term

concept

classification scheme

terminology

related: thesaurus

taxonomy ontology nomenclature code list keyword

statistical typology

narrower:

household register

Definition: A register describing the properties of households

broader: register

index(1)

related: business register

observation register population register territorial register

narrower:

identification function of statistical metainformation system (SMS)

Definition: A function of SMS oriented on identification and determination of

available statistical information

broader: function of statistical metainformation system

related: location function of SMS

retrieval function of SMS processing function of SMS interpretation function of SMS analytic function of SMS

narrower:

identification of a statistical indicator

Definition: The process of making a union of characteristics of certain

phenomenon in the object system in order to define an statistical

indicator which corresponds them by its construction

broader: statistical indicator

related: construction of a statistical indicator

retrieval of a statistical indicator interpretation of a statistical indicator

narrower:

identifier of a statistical indicator

Definition: A label used to identify a statistical indicator. It may have a form a

short alphanumeric name or a code.

broader: statistical indicator

related: name of statistical indicator

attribute of a statistical indicator value of a statistical indicator

immediate statistical production

Definition: The statistical production carried out directly and in parallel with

processing of the survey

broader: statistical production

related: mediate statistical production

survey instance

emprise

narrower:

index

Definition: (1) An ordered list of some specific data selected from and related to a

larger body of text or to a data file

(2) A ratio or other number derived from a series of observations and

used as comparative indicator

broader:

related: register

business register observation register

narrower:

infological statistical metainformation

Definition: The statistical metainformation that concerns the meaning and contents

of statistical information and statistical information system functions

broader: statistical metainformation

related: datalogical statistical metainformation

narrower:

infologically complete statistical information system

Definition: An information system, which as an integral part contains all the

metainformation that its users use for correct interpretation of output

data

broader: statistical information system procedurally complete SIS

narrower:

information

Definition: Knowledge concerning any objects such as facts, events, things,

processes or ideas including concepts that within a certain context has a

particular meaning (ISO/IEC 2382-1;1992)

broader:

related: data

information system

narrower: directive information

operative information statistical information information processing metainformation

information function of a statistical metainformation system (SMS)

Definition: A function aimed at informing users on statistical information they can

receive from the statistical information system.

broader: function of statistical metainformation system

related; identification function of SMS

location function of SMS retrieval function of SMS processing function of SMS interpretation function of SMS analytic function of SMS

narrower:

information process

Definition: The process carried on data in order to increase the value or

significance of the information conveyed by this data

broader: process

related: sampling process

collection process aggregation process output process

narrower:

information processing

Definition: The operations performed on information or data in order to derive new

information according to a set of rules.

broader: information
related: data processing
narrower: decision making

statistical information processing

information system

Definition: A system which supports decision-making concerning some piece of

reality, the object system by giving the decision makers access to information concerning relevant aspects of the object system and its

environment.

broader: system related information

information processing statistical information

narrower: statistical information system

metainformation system

input-oriented subsystem of statistical information system

Definition: A subsystem of SIS oriented toward collection of statistical data

broader: statistical information system related: output-oriented subsystem of SIS

narrower:

integrated metainformation subsystem

Definition: An integral part of statistical information system where all

metainformation functions and metadata are formed on to a subsystem.

broader: statistical metainformation system

statistical information system

related: metainformation

metadata

narrower:

#### interpretation function of statistical metainformation system (SMS)

Definition: A function of SMS that supports the user in interpretation of statistical

data by providing him with an appropriate factual or rule-based

metainformation

broader: function of statistical metainformation system

related: identification function of SMS

location function of SMS retrieval function of SMS processing function of SMS analytic function of SMS

narrower:

keyword

Definition: Word used for linking to certain classified objects.

broader: term

concept

classification scheme

terminology

related: thesaurus

taxonomy ontology nomenclature code list glossary

statistical typology

narrower:

life cycle of a survey

Definition: An interval of time during which a sequence phases of a survey is

completed

broader: survey

related: survey instance

narrower: content

planning design

data collection

survey data processing statistical data analysis data dissemination

local statistical metadata

Definition: The statistical metadata that are originated and residing in the place

where the operation and maintenance of particular surveys are

performed

broader: statistical metadata related: global statistical metadata

narrower:

location function of statistical metainformation system (SMS)

Definition: A function of SMS oriented on positioning of some statistical data for a

purpose of its actual retrieval

broader: function of statistical metainformation system

related: identification function of SMS

retrieval function of SMS processing function of SMS interpretation function of SMS analytic function of SMS

narrower:

macrodatabase

Definition: The database containing macrodata

broader: database

related: statistical macrodata

macrolevel e-message

Definition: An elementary message on the collection of objects as a whole or on a

sub-collection of this collection. It consists of object, property and time

component

broader: elementary message (e-message)

related: microlevel e-message

statistical macrodata

statistical macroinformation

aggregation process

macrolevel message; statistical message

Definition: An estimated value of certain characteristic of interest for a certain

collection of objects of interest at a certain point of time

broader: message

related: statistical indicator

observation message

narrower:

market analyst

Definition: A person who evaluates demand for statistical data, assesses the

supply, identifies gaps, and determines market opportunities

broader:

related: strategic planner

system administrator

data analyst

measurement attribute of statistical indicator

Definition: The attribute of statistical indicator that describes a measurement unit

for the value of statistical indicator

broader: statistical indicator

attribute of a statistical indicator

related: value of a statistical indicator

narrower:

mediate statistical production

Definition: The statistical production whose results are subjects for carrying out of

special studies or basis for further production of statistics

broader: statistical production

related: immediate statistical production

survey instance

emprise

message

Definition: (1) GENERAL: A combination of characters and symbols designed to

convey information

(2) In INFOLOGICAL THEORY: A convention used to describe factual information in the formalized way by referencing to entities in a

piece of reality that is of interest

broader: communication related: information

narrower: elementary message (e-message)

microlevel message macrolevel message statistical information

metadata

Definition: Data and other documentation that describes objects in a formalized

way

broader: data

related: metainformation statistical metadata

metadata holding

Definition: A logical or physical set of metadata (e.g. database) stored together

with its description (e.g. schema)

broader: statistical metadata

related: statistical metainformation system

data holding

narrower: code list

catalogue register

business register classification scheme

metadata item

Definition: A group of characters describing the data and treated as metadata unit

broader: statistical metadata

related: data item

narrower:

metadata layer

Definition: The layer in the reference model for standardization in statistics used to

denote the set of attributes related to statistical metainformation

broader: statistical metadata

related: data layer

computing layer

narrower:

metainformation

Definition: Knowledge of objects described by metadata

broader:

related: metadata

narrower: statistical metadata

statistical metainformation

methodology

Definition: A structured approach to solve a problem

broader: administered component

related:

narrower: technique

microdatabase

Definition: The database containing microdata

broader: database related: microdata

microinformation

narrower:

microlevel e-message

Definition: An e-message concerning an individual object in a collective of objects

broader: e-message

related: macrolevel e-message

statistical microdata

statistical microinformation

aggregation process

narrower:

microlevel message; observation message

Definition: A reporting observation usually done by measurement on the values of

microlevel variables and objects at certain time that are used as inputs to an estimation and aggregation process producing statistical messages

broader: message

related: statistical message

narrower:

nomenclature

Definition: A list of names of elements of a classification scheme

broader: enumerated value domain

term concept

classification scheme

terminology

related: thesaurus

taxonomy code list ontology glossary keyword

statistical typology

narrower:

non-enumerated value domain

Definition: A value domain specified by a rule describing all permissible values

broader: value domain

related: enumerated value domain

narrower: permissible values

object class

Definition: A set of concepts, abstractions, or things in the natural world that can

be identified with explicit boundaries and meaning and whose properties

and behavior all follow the same rules

broader: data element related: property value domain

narrower:

object of statistical information/data

Definition: A piece of reality on which statistical data is collected

broader: statistical data

statistical information

statistical data

related: statistical information object

narrower:

object system

Definition: A piece of reality, considered as a target system of an information

system

broader:

related: object of statistical data

statistical metainformation system

narrower: object system of interest

object system of control object system of action object system of observation

object system entity object system population

object system entity

Definition: An independent and distinct existence of an objective or conceptual

reality within an object system

broader:

related:

narrower:

object system of action

Definition: The object system of decision-makers and/or of other actors in

activities being served by the information system

broader: object system

related: object system of interest

object system

object system of control object system of observation

narrower:

object system of control

Definition: The piece of reality about which the information system provides

information, in order to facilitate decisions and actions upon the actors

in the object system

broader: object system

related: object system of interest

object system of action object system of observation

narrower:

object system of interest

Definition: The piece of reality upon which the decision-makers act directly

broader: object system

related: object system of control

object system of action object system of observation

narrower:

object system population

Definition: The whole number of objects (entities, statistical units) in the object

system

broader: object system object system entity

statistical unit

narrower:

observation message

Definition: A message containing data used to describe entities in the piece of

reality, which the observation is interested in.

broader: message related: e-message

microlevel message

narrower: data

observation processing

Definition:

A series of actions or operations on statistical observations

broader:

related: statistical information processing

survey data processing survey processing

narrower:

observation register

Definition: A register established at some stage of execution of a statistical survey

and serving either as a basis for aggregation and estimation procedures producing the immediate statistical results of the survey, or for storing

the input object data for potential future reuse

broader: register

related: business register

narrower:

ontology

Definition: A formal specification of a conceptualization; i.e. the objects, concepts,

and other entities that are assumed to exist in some area of interest and

the relationships that hold among them

broader: enumerated value domain

term concept

classification scheme

terminology

related: thesaurus

taxonomy nomenclature

code list glossary keyword

statistical typology

narrower:

operative information

Definition: An information that is, by its nature used in decision making for

operative type of decisions

broader: information

related: directive information

narrower:

output-oriented subsystem of statistical information system

Definition: A subsystem of the statistical information system oriented toward

communication and distribution of statistical information

broader: statistical information system related: input-oriented subsystem of SIS

narrower:

permissible value

Definition: The allowable values for a value domain

broader: value domain

enumerated value domain non-enumerated value domain

related: value meaning

narrower:

pilot survey

Definition: An operation designed to test a preliminary version of all aspects of a

survey

broader: survey

related: life cycle of a survey

narrower:

planning

Definition: A phase of the survey's life cycle comprising design decisions for the

survey concerning mainly object types and populations of interest, variables of interest, object types and variables to be observed and

sampling strategy

broader: life cycle of a survey

related: content

design

data collection

survey data processing statistical data analysis data dissemination

narrower:

population register

Definition: The register describing the properties of members of a population

broader: register

index(1)

related: business register

household register observation register territorial register

narrower:

#### procedurally complete statistical information system

Definition: An information system which contains as an integral part the all

metainformation that are used to support software artifacts and information system administration for operating and maintaining the

procedures of the information system

broader: statistical information system related: infologically complete SIS

narrower:

process; procedure

Definition: A series of actions or operations that make gradual changes leading

towards a particular result

broader: statistical data processing

related:

narrower: information process

sampling process collection process aggregation process output process

#### process oriented statistical metainformation

Definition: The metainformation that is used to document and to support statistical

processes themselves

broader: statistical metainformation

related: product oriented statistical metainformation

narrower:

#### processing function of statistical metainformation system (SMS)

Definition: A function of SMS that supports statistical data processing by supplying

it with the relevant metainformation

broader: function of statistical metainformation system

related: identification function of SMS

location function of SMS retrieval function of SMS interpretation function of SMS analytic function of SMS

narrower:

product

Definition: A finished deliverable of a survey instance or emprise

broader: administered component

related: data set

survey instance

emprise

narrower:

#### product oriented statistical metainformation

Definition: The metainformation system that is oriented for documentation of the

results produced by statistical processes

broader: statistical metainformation

related: process oriented statistical metainformation

narrower:

program

Definition: A group of related surveys broader: administrated component

related:

narrower: survey

property

Definition: A peculiarity common to all members of an object class

broader: data element object class value domain

narrower:

property e-message

Definition: An elementary message that informs about the fact that a certain object

has a certain property at a certain time

broader: e-message

related: relational e-message

qualitative data

Definition: Data describing the attributes or properties that an object possesses

broader: data

statistical data

related: qualitative statistical metainformation

quantitative statistical metainformation

quantitative data

qualitative statistical metainformation

Definition: The statistical metainformation describing the qualitative data

broader: statistical metainformation

related: quantitative statistical metainformation

factual statistical metainformation

free-text factual statistical metainformation

qualitative data

narrower:

quantitative data

Definition: Data expressing a certain quantity, amount or range of values related to

an object. The quantitative data is usually associated with measurement

units

broader: data

statistical data

related: qualitative data

qualitative statistical metainformation quantitative statistical metainformation

narrower:

#### quantitative statistical metainformation

Definition: The statistical metainformation describing the quantitative data

broader: statistical metainformation

related: qualitative statistical metainformation

free-text factual statistical metainformation

quantitative data

narrower:

question

Definition: A request for one or more related pieces of information from a

respondent

broader: questionnaire

related: data element concept response choice

questionnaire

Definition: An identifiable instrument containing questions for gathering data from

respondents

broader: survey

related:

narrower: question

data element concept

register

Definition: A written and complete record containing regular entries of items and

details on particular set of objects

broader:

related: index(1)

narrower: business register

observation register population register territorial register

relational e-message

Definition: An elementary message that informs about the fact that objects are

related to each other in a certain way at a certain time

broader: e-message

related: property e-message

narrower:

reporting unit

Definition: A unit that supplies the data for a given survey instance

broader: survey instance

unit

related: questionnaire statistical unit

narrower:

representation class

Definition: A classification of value domains based upon the data type

broader: data element related: value domain

narrower: data type

response choice

Definition: One of several alternative answers to a question

broader: question related: value domain narrower: permissible value

retrieval function of statistical metainformation system (SMS)

Definition: A function of the statistical information system oriented on finding the

selected data and depicted it to the user

broader: function of statistical metainformation system

related: identification function of SMS

location function of SMS processing function of SMS interpretation function of SMS analytic function of SMS

narrower:

retrieval of statistical information

Definition: A function of statistical information system oriented on discovering or

locating of statistical information and getting it out from the system

broader: statistical information processing collection of a statistical information storage of a statistical information

transformation of a statistical information distribution of a statistical information

user interaction with a statistical information system communication with a statistical information system

narrower: retrieval of statistical indicator

rule based statistical metainformation

Definition: The metainformation that is used to control the production of statistical

information. It may have a form of a definition, a method, a law, an

algorithm or a description of system behavior

broader: statistical metainformation

related: factual statistical metainformation

sample

Definition: A subset of a frame where elements are selected based on a

randomized process with a known probability of selection

broader: universe

frame

related: survey

narrower:

sampling process

Definition: The process of selecting a sample from a frame

broader: process

sample frame

related: information process

collection process

aggregation process output process

narrower:

schema

Definition: A logical description of the content, structure, and constraints of a

system

broader: system related: metadata

narrower: database schema

software artifact

Definition: A product developed by human beings but executed by computers

broader:

related: client of information system

system administrator

narrower:

statistical catalogue

Definition: A code list of statistical indicators, metadata, questionnaires, tables and

other defined elements of a statistical information system

broader: interpretation of a statistical indicator

related: register

narrower:

statistical category

Definition: (1) A fundamental form, defined by statistical methodology, to which a

particular object of statistical observation may belong

(2) An attribute which describes the basic subject-matter division of the

statistical information system into homogeneous classes.

broader:

related: classification scheme

nomenclature code list

narrower: attributes of a statistical category

statistical computing

Definition: Mathematical or logical operations carried out on statistical data

according to a set of rules derived from statistical methodology

broader:

related: statistical data processing

statistical information processing

narrower:

statistical data

Definition: Data that are collected and/or generated by statistics in process of

statistical observations or statistical data processing.

broader: data

related: statistical information narrower: object of statistical data

statistical microdata statistical macrodata statistical metadata statistical data analysis

Definition: An activity of the survey life cycle for the evaluation of the social-

economic phenomena described by means of statistical data

broader: life cycle of a survey

related: planning

design data collection

survey data processing

survey data proces

content

data dissemination

narrower:

statistical data collection

Definition: The operation of statistical data processing aimed at gathering of

statistical data and producing the input object data of a statistical survey

broader: statistical data processing related: statistical data editing

statistical data analysis

statistical survey

narrower: derived statistical data collection

statistical observation and measurement

statistical data editing

Definition: The operation of detecting and correcting errors in statistical data

broader: survey data processing

related: data collection

statistical data analysis

narrower:

statistical graph

Definition: A diagram that represents a variation of the values of one statistical

indicator with respect to the values of one or more other statistical

indicators

broader: statistical data related: product statistical table

narrower:

statistical indicator

Definition: A data element that represents statistical data for a specified time,

place, and other characteristics

broader: statistical data

statistical information

related: statistical macrodata

statistical microdata statistical metadata

statistical metainformation

narrower: elementary statistical indicator

composite statistical indicator identifier of a statistical indicator attribute of a statistical indicator value of a statistical indicator

statistical information

Definition: An information gathered by statistical observation or produced by

survey data processing. Statistical information describes, express in

figures, characteristics of a community (population).

broader: information related: statistical data

statistical information system

narrower: statistical macroinformation

statistical microinformation statistical information processing

statistical information processing

Definition: The information processing driven by set of rules that are derived from

statistical methodology.

broader: statistical information

information processing

related: statistical data processing

statistical observation processing

survey processing statistical production

statistical information system

narrower: collection of a statistical information

storage of a statistical information transformation of a statistical information retrieval of a statistical information distribution of a statistical information

user interaction with a statistical information system communication with a statistical information system

statistical information system (SIS)

Definition: The information system oriented towards the collection, storage,

transformation and distribution of statistical information

broader: information system related: statistical information

statistical information processing

narrower: input-oriented subsystem of SIS

output oriented subsystem of SIS infologically complete SIS procedurally complete SIS

statistical metainformation system

statistical layer

Definition: The layer in the reference model for standardization in statistics used to

denote methods and algorithms of statistical computing

broader: statistical computing

related: data layer

metadata layer

narrower:

statistical macrodata

Definition: An observation data gained by a purposeful aggregation of statistical

microdata conforming to statistical methodology.

broader: statistical data

related: statistical microdata

statistical unit for macrodata statistical microinformation statistical macroinformation macrolevel e-message

narrower:

statistical macrodatabase

Definition: The database containing statistical macrodata

broader: database

related: statistical macrodata

microdatabase

narrower:

statistical macroinformation

Definition: The knowledge contents of statistical macrodata as interpreted by

human being.

broader: statistical information related: statistical macrodata

statistical microinformation macrolevel e-message

narrower:

statistical message

Definition: A message carrying statistical data

broader: message

**GESMES** 

related: statistical data

microlevel e-message macrolevel e-message macrolevel message

narrower:

statistical metadata

Definition: Metadata describing statistical data

broader: metadata

statistical data

related: statistical metainformation

metadata holding metadata layer

statistical metadata processing statistical metadata supplier statistical metadata consumer

narrower: statistical metadata item

local statistical metadata global statistical metadata

survey specific statistical metadata survey independent statistical metadata

statistical metadata consumer

Definition: A user of statistical metainformation

broader: user

statistical metadata

statistical metadata processing statistical metadata consumer

narrower:

statistical metadata processing

Definition: The operation performed on statistical metadata in order to derive new

information or metainformation

broader: data processing

statistical metadata

statistical data processing

related: statistical metadata supplier

statistical metadata consumer

narrower: collection of statistical metadata

statistical metadata supplier

Definition: A user of a statistical metainformation system who supplies metadata

into a statistical information system

broader: statistical metadata

user

related: statistical metainformation user

statistical metadata processing statistical metadata consumer

narrower:

statistical metadata system

Definition: The data processing system that uses, stores, and produces statistical

metadata

broader: statistical metadata

related: statistical metainformation system

narrower:

statistical metainformation

Definition: Knowledge of objects described by statistical metadata

broader: information

metainformation

related: statistical metadata

statistical metainformation system

narrower: statistical metainformation object

rule based statistical metainformation factual statistical metainformation

product oriented statistical metainformation process oriented statistical metainformation quantitative statistical metainformation qualitative statistical metainformation free-textual statistical metainformation infological statistical metainformation datalogical statistical metainformation

#### statistical metainformation system (SMS)

Definition: An information system for which the object is the statistical information

system. The statistical metainformation system uses and stores statistical metadata and produces statistical metainformation for

purpose of supporting decision making concerning an information

system.

broader: statistical information system

statistical metainformation

related: statistical information processing

statistical metadata system

narrower: function of a statistical metainformation system

integrated metainformation subsystem

statistical microdata

Definition: An observation data collected on an individual object - statistical unit.

broader: statistical data related: statistical macrodata

statistical unit for microdata statistical microinformation microlevel e-message

narrower:

statistical microdatabase

Definition: The database containing statistical microdata

broader: database

related: statistical microdata

macrodatabase

narrower:

statistical microinformation

Definition: The knowledge contents of statistical microdata as interpreted by

human being.

broader: statistical information related: statistical microdata

statistical macroinformation microlevel e-message

narrower:

statistical production

Definition: The activity that is carried out within statistical information system and

aimed at producing of statistics

broader: statistics

related: statistical information processing

statistical data processing

survey processing

narrower: immediate statistical production

mediate statistical production

statistical survey preparation

Definition: A first operative task that includes an establishing of a frame of survey

as for the data sources, respondents, objects of observation and interest, drawing a sample from the frame and establishing of empty observation register. A survey preparation is executed after the survey plan has

been established

broader: life cycle of a statistical survey related: statistical survey planning

statistical survey operation

statistical survey output preparation

narrower:

statistical table

Definition: A method of presenting statistical data to the user that contains data

elements, a format (usually a multidimensional array), and labels for

rows and columns

broader: statistical data

related: product

statistical graph

narrower:

statistical typology

Definition: A study of or analysis or classification based on statistical types. The

basic tools of statistical typology are classification schemes,

nomenclatures and code lists.

broader: enumerated value domain

term concept

classification scheme

terminology

related: thesaurus

taxonomy ontology nomenclature code list glossary keyword

narrower:

statistical unit

Definition: An object of statistical survey and the bearer of statistical

characteristics. The statistical unit is the basic unit of statistical

observation within a statistical survey

broader: unit

related: statistical data

narrower: statistical unit for microdata

statistical unit for macrodata

statistical unit for macrodata

Definition: A statistical unit which is a carrier or a supplier of statistical macrodata

in statistical system

broader: statistical unit related: macrodata

statistical unit for microdata

narrower:

statistical unit for microdata

Definition: A statistical unit which is a carrier or a supplier of statistical microdata

in statistical system

broader: statistical unit related: microdata

statistical unit for macrodata

storage of a statistical information

Definition: A function of statistical information system oriented on storing and

preserving statistical information for later use on permanent storage

media

broader: statistical information processing related: collection of a statistical information

transformation of a statistical information retrieval of a statistical information

distribution of a statistical information

user interaction with a statistical information system communication with a statistical information system

narrower:

strategic planner

Definition: A person that ensures the appropriate resources are identified, available

and allocated to respond to market demand

broader: information system user related: information system designer

survey designer

narrower:

subject matter statistician

Definition: A person with a special competence and knowledge of particular

branch of statistics

broader: statistical information system designer related: information system methodologist

data administrator

narrower:

survey

Definition: An investigation about the characteristics of a given population by

means of collecting data from a sample of that population and

estimating their characteristics through the systematic use of statistical

methodology

broader: statistical information system designer

related:

narrower: sample survey

statistical survey

survey data processing statistical data processing

Definition: The operations in the survey life cycle performed on statistical data in

order to derive new information according to a set of methodological

rules used in survey processing

broader: life cycle of a survey

data processing

related: planning

design

data collection

content

statistical data analysis data dissemination

#### survey documentation

Definition: Documentation describing the life cycle of a survey

broader: documentation

survey

related:

narrower: content

planning design

data collection

survey data processing statistical data analysis data dissemination

#### survey independent statistical metadata

Definition: Statistical metadata universally used in processing of any statistical

survey

broader: statistical metadata related: statistical survey

survey specific statistical metadata

narrower:

survey instance

Definition: A particular survey and time period in which data are collected from

respondents

broader: survey

sample survey statistical survey

related:

narrower: data set

survey processing

Definition: A series of operations on data collected within a given survey leading to

the production of requested outputs from the survey

broader: statistical survey

related: statistical information processing

statistical data processing

statistical observation processing

narrower: survey processing system

survey documentation

survey processing system

Definition: The system that processes the data collected via a survey

broader: survey processing

system

related: statistical information system

narrower:

survey specific statistical metadata

Definition: The statistical metadata that is used in processing of particular

statistical survey

broader: statistical metadata related: statistical survey

survey independent statistical metadata

narrower:

system

Definition: An identifiable process, either fully automated or computer assisted,

which implements one or more techniques

broader: administered component

related: questionnaire

survey

survey instance

technique

narrower: survey processing system

system administrator

Definition: A person responsible for operating and maintaining an information

system, developing its parts, and giving assistance to the end-users

broader: information system operator

related: data administrator

system developer system designer

narrower:

system developer

Definition: A person that develops a database container schema based on the

survey content schema

broader: information system designer

related: strategic planner

survey designer

narrower:

taxonomy

Definition: A classification according to presumed natural relationships

broader: enumerated value domain

term concept

classification scheme

terminology

related: thesaurus

glossary ontology nomenclature code list keyword

statistical typology

narrower:

technique

Definition: An identifiable algorithm that is used to implement all or part of a

methodology

broader: methodology

related:

narrower: system

term

Definition: A word or phrase used to designate a concept

broader: concept

related: narrower:

terminology

Definition: A set of terms

broader: term

concept

related: classification scheme

enumerated value domain

narrower: code list

glossary nomenclature ontology taxonomy thesaurus

statistical typology

territorial register

Definition: A register describing the properties of regions defined for the purposes

of statistical observation

broader: interpretation of a statistical indicator

related: business register

household register observation register population register

narrower:

thesaurus

Definition: A controlled set of terms covering a specific domain of knowledge

formally organized so that the *a priori* relationships between concepts

are made explicit

broader: enumerated value domain

term concept terminology

classification scheme

related: taxonomy

ontology nomenclature code list glossary keyword

statistical typology

narrower:

transformation of a statistical information

Definition: A function of statistical information system oriented on changing of a

statistical information in accordance with the rules given by statistical

methodology or statistical production

broader: statistical information processing

related: collection of a statistical information

storage of a statistical information retrieval of a statistical information distribution of a statistical information

user interaction with a statistical information system communication with a statistical information system

narrower:

unit

Definition: A single element or a group of elements regarded as a whole in

observations and computing

broader:

related: data

narrower: statistical unit

unit of measure.

Definition: A system of measurement

broader: value domain

related: representation class

narrower:

universe

Definition: The total population of interest for one or more surveys

broader: related:

*narrower:* frame

user interaction with a statistical information system

Definition: A function of the statistical information system, that provides the

possibilities to interact different categories of users with the system

broader: statistical information processing collection of a statistical information storage of a statistical information

transformation of a statistical information retrieval of a statistical information distribution of a statistical information

communication with a statistical information system

narrower:

user interface component

Definition: The part of database system containing a user interface, supported by

software and by software related metadata

broader: database system component

related: statistical metainformation system user

statistical information system user

narrower:

value domain

Definition: A set of permissible values and their associated value meanings

broader: administered component

data element

related:

narrower: enumerated value domain

non-enumerated value domain

permissible values value meaning

value meaning

Definition: The meaning or definition of a permissible value

broader: value domain related: permissible value

narrower:

value of a statistical indicator

Definition: A numerical quantity observed or computed within a statistical survey

and assigned to the statistical indicator

broader: statistical indicator

related: name of a statistical indicator

attribute of a statistical indicator identifier of a statistical indicator

narrower: