

GSIM e-training

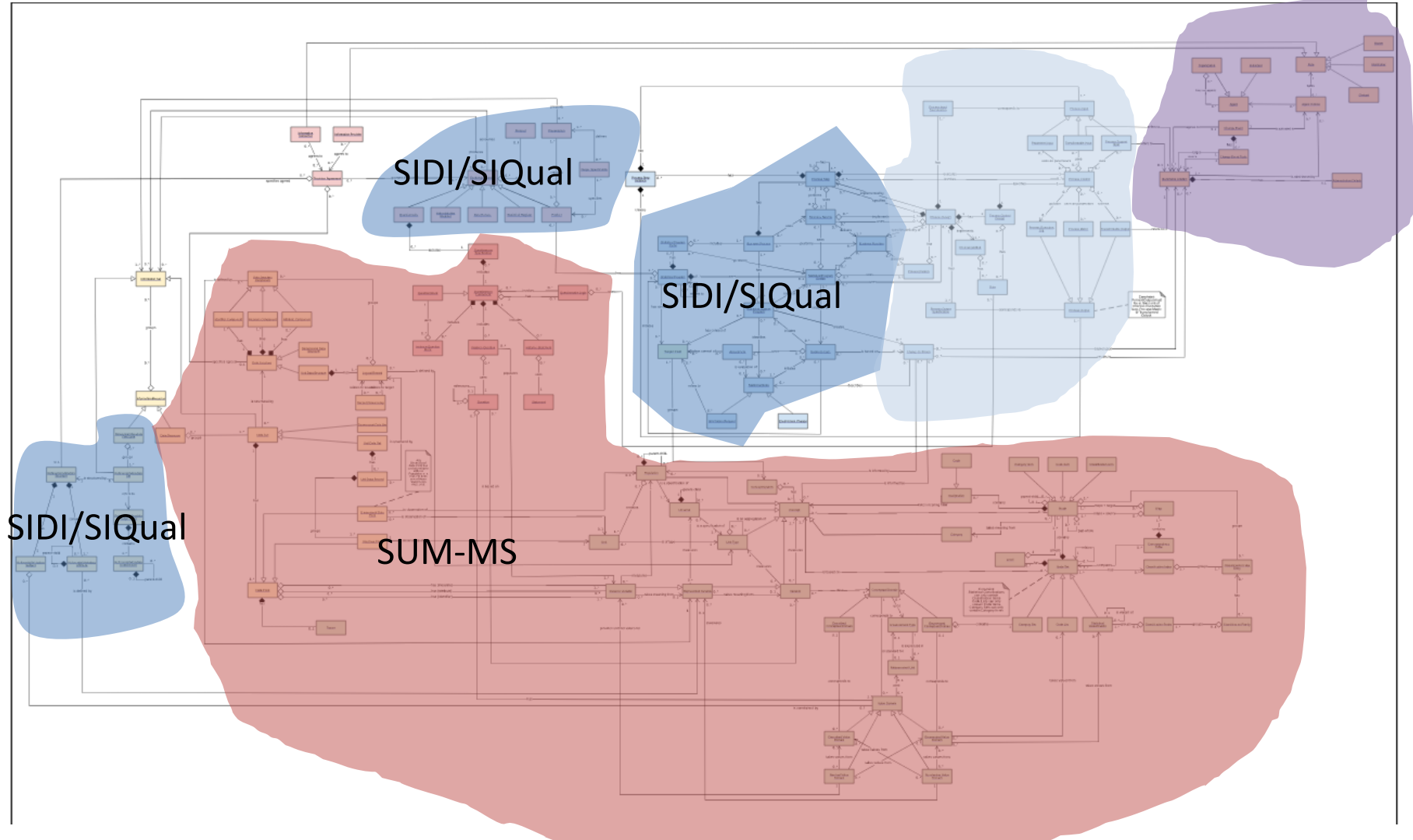
5 November 2019

# Application of GSIM in Istat

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Istat

- GSIM applied at Istat for the **conceptual representation of metadata** in metadata system
- Most of the GSIM Information Objects from ***Concept*** and ***Structure Groups*** already implemented in the Istat **Structural Metadata System SUM-MS**
- ***Business, Exchange*** and ***Structure Groups*** Information Objects are supporting the redesign of Istat System for **Reference Metadata** and **Quality of Statistical Processes SIDI/SIQual**
- ***Business Group*** Information Objects are also being considered for modelling the **metadata-driven system** for managing **the data processing in short-term surveys (SINTESI)**



SIDI/SIQual

SIDI/SIQual

SIDI/SIQual

SUM-MS

# Implementation in SUM-MS

- SUM-MS has been already modelled according to GSIM Concepts and Structure Groups
- Some adaptations have been considered. For instance, the concept *Variable* has been specified in order to distinguish different kinds of variables

Definition	Explanatory Text
<p>The use of a <i>Concept</i> as a characteristic of a <i>Population</i> intended to be measured</p>	<p>The Variable combines the meaning of a Concept with a Unit Type, to define the characteristic that is to be measured.</p> <p>Here are 3 examples -</p> <ol style="list-style-type: none"><li>1. Sex of person</li><li>2. Number of employees</li><li>3. Value of endowment</li></ol>

Population=«Households in Italy in 2017»  
Measure component=«Average households' annual income»  
where:  
Identifier component=«Number of HH components \*  
Territory \* Main income source \* year»

Unit type: «Household»  
Population: «Households in Italy in 2017»  
Represented variable:  
«Household annual income»

4. Household annual income
5. Average households' annual income

## Proposal

Characterize those variables that are obtained by specific *Steps* of a *Statistical Program Design* (specifically, those in the GSBPM phases *Process* and *Analyse*), by highlighting at least some components of a *Process Step's Process Design*.

- For instance, for the sub-process phase 5.7 *Calculate aggregates*:
  - *Universe* and *Variable* that characterize the input data (described in *Process Input Specification*) to be transformed in aggregate data
  - *Process Method* (e.g. average, total, ...)

1. Mapping metadata concepts included in SIDI/SIQual with GSIM Information Objects
2. Take advantage of GSIM to design enhancements
3. Adaptation and further specification when needed

# SIDI/SIQual main metadata concepts

## INPUT:

- Reporting unit and frame
- Administrative bodies and registers
- Other statistical processes

Phases  
Operations  
Sub-operations

## Focus on methodology:

Sampling design  
Index production methodology

GENERALISED SOFTWARE

QUALITY CONTROL ACTIONS

## DOCUMENTS REPOSITORY

Legislation,  
Questionnaires,  
Methodological Documents

## OUTPUT:

Volumes  
Press releases  
Online databases  
Other

## Statistical Process

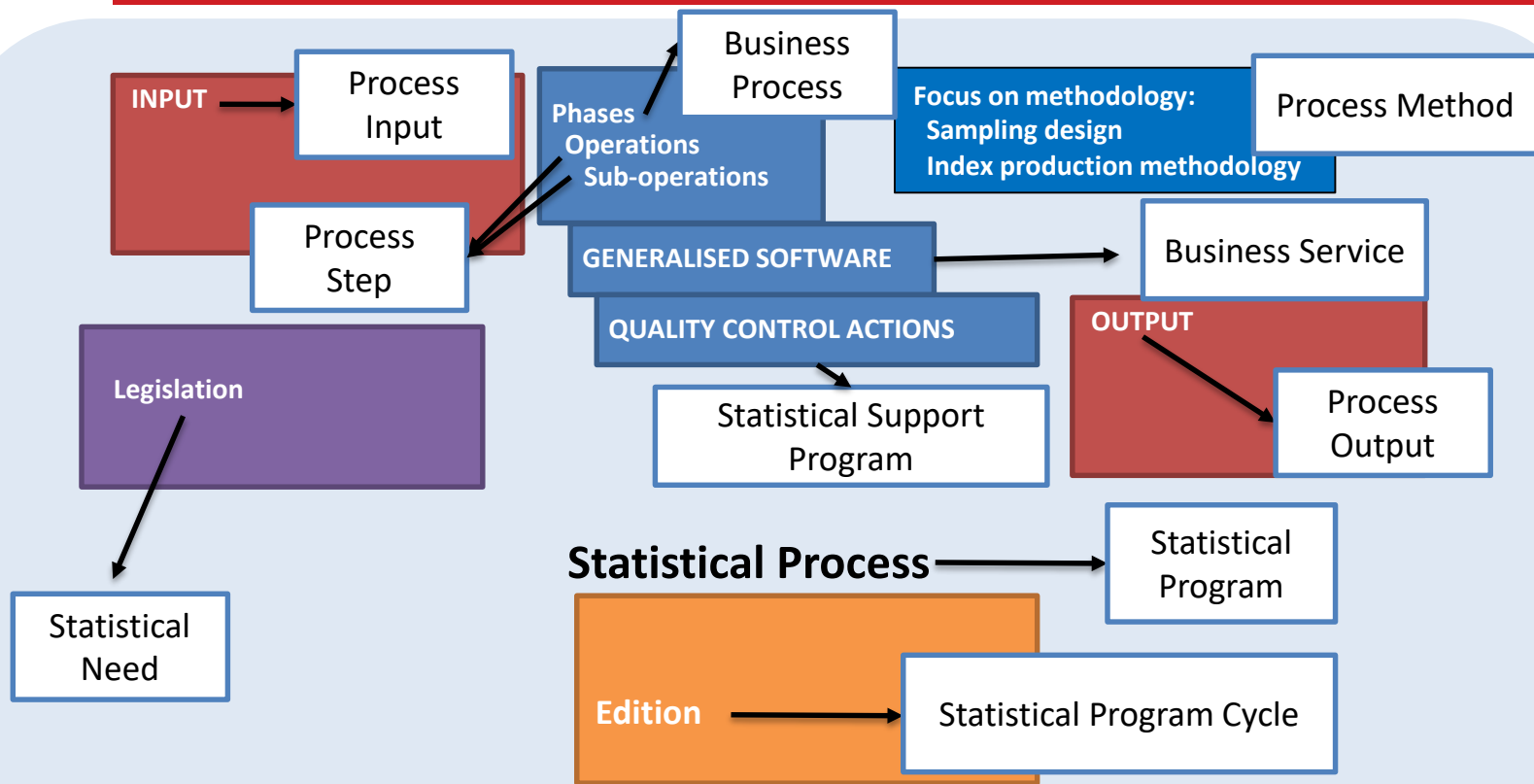
## GENERAL INFORMATION:

Description, Frequency,  
Edition, Manager...

## CONCEPTUAL METADATA

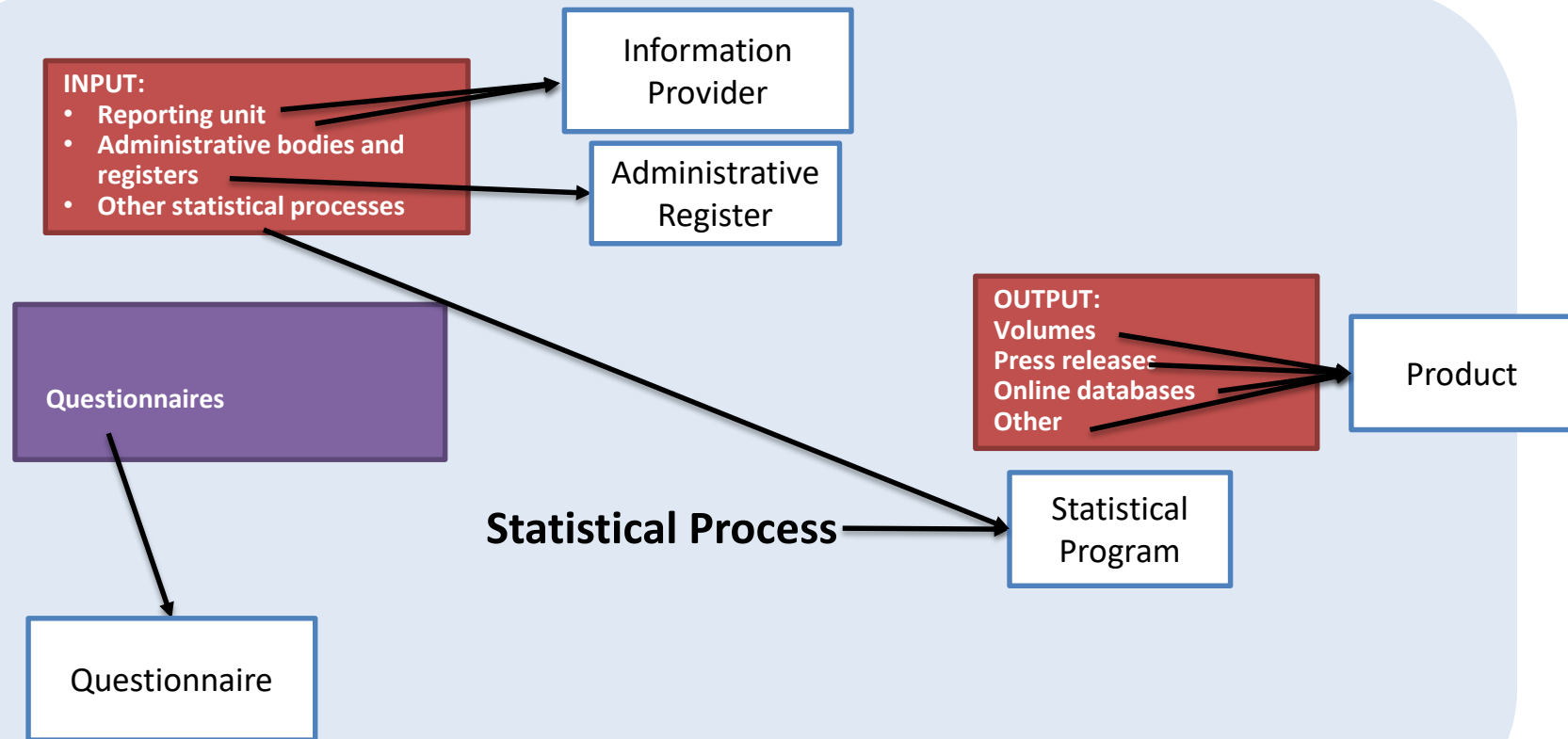
Area  
Topics

# Mapping SIDI/SIQual and GSIM Business Group





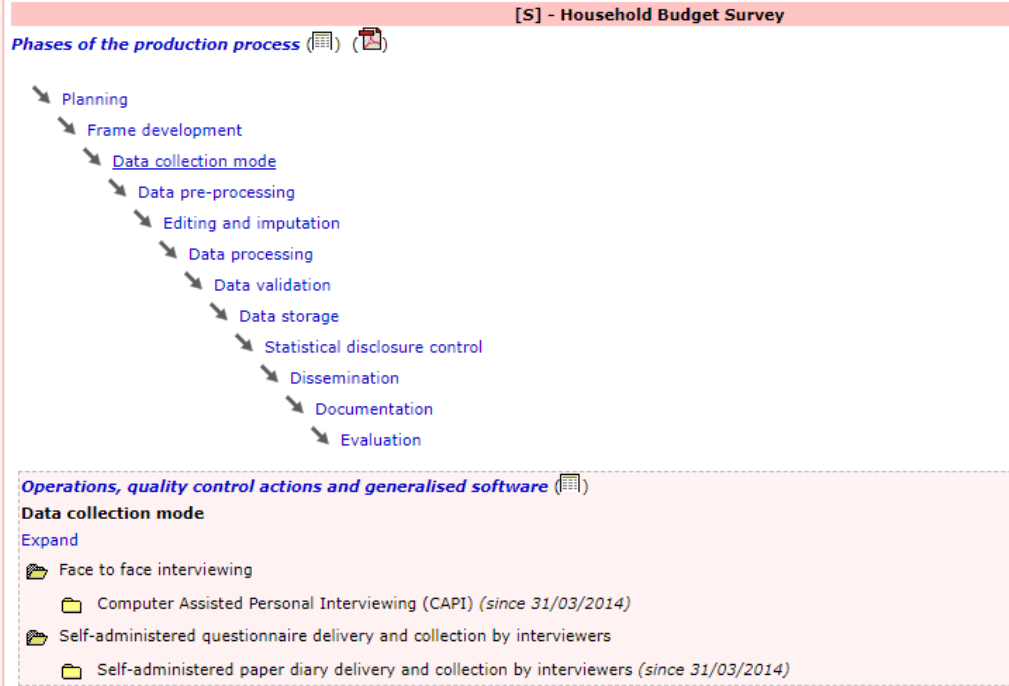
# Mapping SIDI/SIQual and GSIM Exchange Group



# Take advantage of GSIM to design enhancements: example

Phases  
Operations  
Sub-operations

- The workflow is fixed, this should be improved
- GSIM IO *Process Control Design* could help



# Adaptation and further specification: example

**OUTPUT:**  
Volumes  
Press releases  
Online databases  
Other

- GSIM *Product* IO needs to be further specialised in Press releases, Volumes, Online databases...
- Not only the *Presentation* is different, but also the way they are managed in the metadata system

[C] - System of Health Accounts (SHA)

**i** List of publications ordered by year of edition and grouped by Series. If available on-line, publications are accessible by clicking on titles.

[Press releases](#)

*Statistics-Report*

- **The System of Health accounts in Italy. Years 2012-2016**  
*The system of health accounts in Italy*  
Edition: 2017, Reference period for data: Years 2012-2016

[Other institutions volumes](#)

- **Health at a glance 2017**   
Organisation for Economic Co-operation and Development (Oecd)  
Edition: 2017
- **Health at a glance: Europe 2016**   
Organisation for Economic Co-operation and Development (Oecd)  
Edition: 2016

[C] - System of Health Accounts (SHA)

**i** List of on-line data (Istat or non-Istat data bases and tables). Data are accessible by clicking on the titles.

[Istat data bases](#)

- **I.Stat**

[Non Istat data bases](#)

- **Banca dati Eurostat**  
Eurostat (Statistical office of the European Union)
- **Database OCSE**  
Organisation for Economic Co-operation and Development (Oecd)
- **World Health Organisation**  
Eurostat (Statistical office of the European Union)

