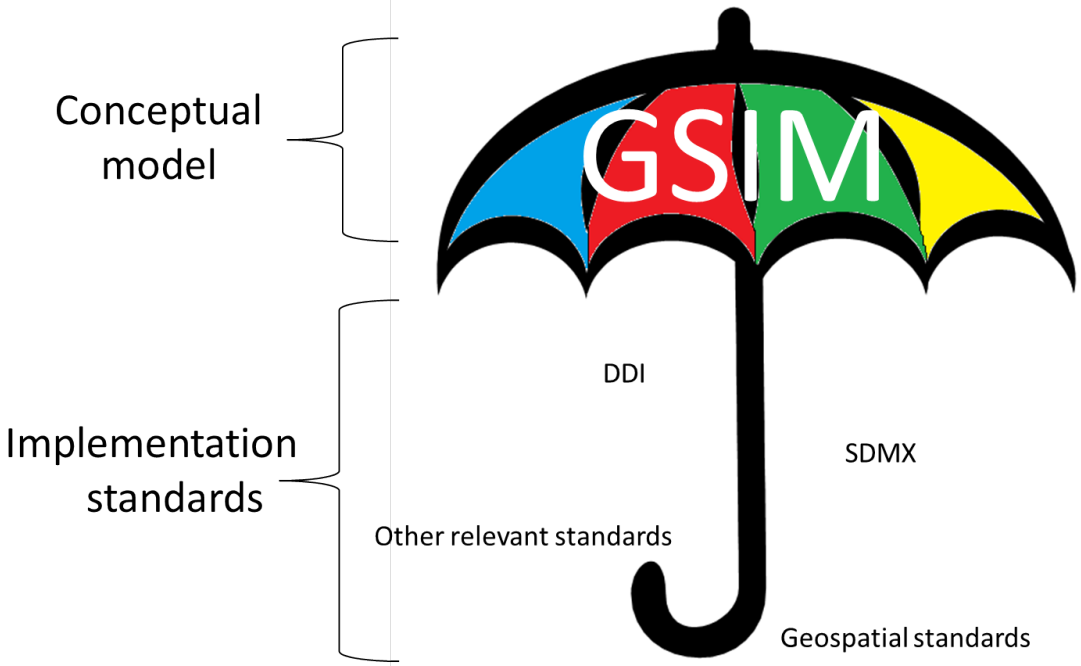
GSIM and standards

GSIM and other standards

In order to effectively implement GSIM at a technical level, it should be implemented at a business level first. GSIM does not provide any standard representation of its own, and is intended to be implemented using existing external standards and models, which support technical implementation. This may involve mapping to internal data models or implementation standards used within an organization.

Organizations implementing GSIM will need to map the GSIM objects against their implementation models. In doing this, gaps between GSIM and the implementation standards or internal models will need to be identified. Mappings of GSIM to an organization's internal models can be shared with the community via the Global Artefact Catalogue (to be developed in 2014).

For some common standard models, GSIM mappings have been provided. The design of GSIM takes into account the possibility to map to implementation models, such as SDMX or DDI. Such a mapping can be used to establish a link between GSIM and its technical implementation.



Mapping DDI to GSIM (see also DDI Profiles)

Object	DDI
Administrative Details	--

Administrative Register	CollectionEvent [this can describe an intended event rather than a past event] 3.2 contains instrument reference
Agent	--
Agent Role	Organization/Individual referenced from a specific role within an activity [more extensive in 3.2 in terms of coverage]
Assessment	Other material of type assessment [3.2 QualityStatementReference found at different points to point to Quality assessment standards or processes employed]
Attribute Component	3.1 Variable/Representation/Role (simple string) [3.2 UserAttributePair (to create key value pair on any versionable/maintainable object)] (controlled vocabulary)
Business Case	Other Material [3.2 Legal requirements, Authorization Source]
Business Function	No mapping
Business Process	No mapping
Business Service	No mapping
Category	No mapping
Category Item	Category
Category Set	CategoryScheme
Change Definition	No mapping
Classification Family	No direct mapping
Classification Index	No direct mapping
Classification Index Entry	No direct mapping
Classification Item	No direct mapping
Classification Series	No direct mapping
Code	No Mapping
Code Item	Code
Code List	CodeScheme [3.2 CodeList]
Code Value	Code/Value

Concept	Concept
Concept System	Partial mapping ConceptScheme
Conceptual Domain	No mapping
Correspondence Table	No direct mapping
Data Point	Data Item
Data Resource	Archive/Collection
Data Set	PhysicalInstance
Data Structure	LogicalProduct or NcubeLogicalProduct [3.2 LogicalProduct]
Data Structure Component	
Datum	Item value/value
Described Conceptual Domain	No mapping
Described Value Domain	Text Numeric and Datetime representation
Designation	No mapping
Dimensional Data Point	Inline, Normal and Tabular NCube/ Data Item DataItem (Inline, Normal, Tabular)
Dimensional Data Set	PhysicalDataProduct/Ncube (any of the types) Ncube (any of the types: Inline, Normal and Tabular)
Dimensional Data Structure	LogicalProduct/Ncube
Enumerated Conceptual Domain	No mapping
Enumerated Value Domain	Code representation
Environment Change	[possibly as QualityStatementReference, citing the standard/policy/procedure, and results]
Exchange Channel	CollectionEvent [this can describe an intended event rather than a past event] 3.2 contains instrument reference
Identifiable Artefact	Identifiable

Identifier Component	Logical Record/Case Identifier (works well in a single file) 3.1 Variable/Representation/Role (simple string) 3.2 Variable with VariableRole (stating role as case identification) (controlled vocabulary)
Individual	Individual
Information Consumer	Organization (3.2 both producer and consumer Organizations described, Relation linking producer to consumer and Role designating role of one to the other)
Information Provider	Organization (3.2 both producer and consumer Organizations described, Relation linking producer to consumer and Role designating role of one to the other)
Information Request	no mapping
Information Resource	no mapping
Information Set	--
Instance Question	QuestionConstruct
Instance Question Block	MultipleQuestionItem (used by QuestionConstruct) [3.2 QuestionBlock used by a QuestionConstruct or more correctly in DDI Sequence containing QuestionConstructs]
Instance Statement	StatementItem
Instance Variable	Unit Data: Physical Data Product/Record Layout Scheme/ Record Layout/Data Item/Variable Reference Dimensional Data: Physical Data Product/Record Layout Scheme/ Record Layout/NCube Instance/Data Item/Dimension/Variable Reference
Level	Level
Logical Record	LogicalRecord
Map	No direct mapping

Measure Component	3.1 Variable/Representation/Role (simple string) 3.1 Logical Record/Variables in Record
Node	No mapping
Node Set	No mapping
Organization	[Organization/Individual with Relation and Role specification]
Output Specification	No mapping
Population	Universe
Presentation	No mapping
Process Control	Coding/Code ControlConstructs
Process Control Design	--
Process Design	No mapping
Process Input	Coding/Code [3.2 InParameter]
Process Input Specification	No mapping [3.2 InParameter, Binding]
Process Method	No mapping
Process Output	No single mapping [3.2 OutParameter]
Process Output Specification	No single mapping
Process Pattern	
Process Step	Coding/Code ControlConstructs [3.2 GenerationInstruction, GeneralInstruction, ControlConstructs]
Process Step Instance	No mapping
Product	--
Protocol	--
Provision Agreement	Archive/Access – access conditions, disclaimers, restrictions (can be used for collection or item) Access (AccessConditions, Disclaimer, Restrictions)
Question	QuestionItem

Question Block	Sequence [3.2 QuestionBlock or Sequence]
Questionnaire	CollectionEvent [this can describe an intended event rather than a past event] 3.2 contains instrument reference
Questionnaire Component	ControlConstructs (and substitutions)
Questionnaire Logic	ControlConstructs (and substitutions)
Questionnaire Specification	Instrument
Record Relationship	RecordRelationship
Referential Metadata Attribute	--
Referential Metadata Content Item	--
Referential Metadata Resource	no mapping
Referential Metadata Set	--
Referential Metadata Structure	--
Referential Metadata Subject	--
Referential Metadata Subject Item	--
Represented Variable	Variable
Rule	Coding [3.2 GenerationInstruction, GeneralInstruction]
Scraping Process Map	--
Sign	No mapping
Statement	StatementItem
Statistical Classification	No mapping
Statistical Need	no mapping
Statistical Program	Group
Statistical Program Cycle	StudyUnit
Statistical Program Design	no mapping
Statistical Support Program	--
Subject Field	No direct mapping
Unit	No mapping
Unit Data Point	RecordLayout
Unit Data Record	No mapping

Unit Data Set	PhysicalInstance that contains microdata
Unit Data Structure	LogicalProduct
Unit Type	AnalysisUnit
Value Domain	Representation [3.2 ValueRepresentation]
Variable	Data Element Concept
Web Scraper Channel	CollectionEvent [this can describe an intended event rather than a past event] 3.2 contains instrument reference

Mapping SDMX to GSIM

Object	SDMX
Administrative Details	No Mapping
Administrative Register	--
Agent	See Organization Scheme
Agent Role	No mapping
Assessment	No Mapping
Attribute Component	Data Attribute (but only for dimensional data)
Business Case	No Mapping
Business Function	No Mapping
Business Process	No Mapping
Business Service	No Mapping
Category	No Mapping
Category Item	No Mapping
Category Set	No Mapping
Change Definition	No Mapping
Classification Family	No Mapping
Classification Index	No Mapping
Classification Index Entry	No Mapping
Classification Item	Hierarchical Code
Classification Series	No Mapping
Code	No mapping
Code Item	Code
Code List	Codelist

Code Value	No mapping
Concept	Concept
Concept System	No mapping
Conceptual Domain	No mapping
Correspondence Table	Codelist Map or Hybrid Codelist Map
Data Point	No Mapping
Data Resource	No Mapping
Data Set	Data Set
Data Structure	Data Structure Definition (but only applies to Dimensional data)
Data Structure Component	Component
Datum	Codelist Map or Hybrid Codelist Map
Described Conceptual Domain	Codelist Map or Hybrid Codelist Map
Described Value Domain	non enumerated association between Representation and Facet
Designation	non enumerated association between Representation and Facet
Dimensional Data Point	No Mapping
Dimensional Data Set	Data Set
Dimensional Data Structure	Data Structure Definition
Enumerated Conceptual Domain	No Mapping
Enumerated Value Domain	enumerated association between Representation and Codelist
Environment Change	No Mapping
Exchange Channel	Registration
Identifiable Artefact	Identifiable Artefact
Identifier Component	Dimension (but only for Dimensional data)
Individual	No Mapping
Information Consumer	Data Consumer
Information Provider	Data Provider
Information Request	No Mapping
Information Resource	No Mapping
Information Set	No Mapping
Instance Question	No Mapping
Instance Question Block	No Mapping
Instance Statement	No Mapping
Instance Variable	No Mapping

Level	Level
Logical Record	No Mapping
Map	Code Map or Hybrid Code Map
Measure Component	Measure (but only for dimensional data)
Node	Item
Node Set	Item Scheme
Organization	Organisation Unit
Output Specification	No Mapping
Population	No Mapping
Presentation	No Mapping
Process Control	Transition
Process Control Design	Transition
Process Design	No Mapping
Process Input	"input" association between Process Step and Process Artefact
Process Input Specification	No Mapping
Process Method	No Mapping
Process Output	"output" association between Process Step and Process Artefact
Process Output Specification	No Mapping
Process Pattern	Process
Process Step	Process Step
Process Step Instance	No Mapping
Product	No Mapping
Protocol	No Mapping
Provision Agreement	Provision Agreement (but GSIM definition is much broader)
Question	No Mapping
Question Block	No Mapping
Questionnaire	No Mapping
Questionnaire Component	No Mapping
Questionnaire Logic	No Mapping
Questionnaire Specification	No Mapping
Record Relationship	No Mapping
Referential Metadata Attribute	MetadataAttribute
Referential Metadata Content Item	Component?
Referential Metadata Resource	No Mapping

Referential Metadata Set	MetadataSet
Referential Metadata Structure	ReportStructure
Referential Metadata Subject	MetadataTarget?
Referential Metadata Subject Item	MetadataTarget?
Represented Variable	No Mapping
Rule	Computation
Scraping Process Map	--
Sign	No Mapping
Statement	No Mapping
Statistical Classification	Hierarchical Code List
Statistical Need	No Mapping
Statistical Program	No Mapping
Statistical Program Cycle	No Mapping
Statistical Program Design	No Mapping
Statistical Support Program	No Mapping
Subject Field	Category
Unit	No Mapping
Unit Data Point	No Mapping
Unit Data Record	No Mapping
Unit Data Set	No Mapping
Unit Data Structure	No Mapping
Unit Type	No Mapping
Value Domain	Representation
Variable	No Mapping
Web Scraper Channel	--