

# Metamodel for the Federal Transition Framework (FTF), Beta 1

*OMG Adopted Specification*

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Associated Schema Files\*: <http://www.omg.org/spec/FTF/20070901/>

<http://www.omg.org/spec/FTF/20070901/FederalTransitionFramework.xsd>

<http://www.omg.org/spec/FTF/20070901/FTF-Subset-of-FEACRM.xsd>

<http://www.omg.org/spec/FTF/20070901/OrganizationStructure.xsd>

<http://www.omg.org/spec/FTF/20070901/FTF-CMOF-XMI-PIM.xml>

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\* original .zip file: gov/07-09-04

This OMG document replaces the submission document (gov/2007-09-04, Alpha). It is an OMG Adopted Beta Specification and is currently in the finalization phase. Comments on the content of this document are welcome, and should be directed to [issues@omg.org](mailto:issues@omg.org) by June 20, 2008.

You may view the pending issues for this specification from the OMG revision issues web page <http://www.omg.org/issues/>.

The FTF Recommendation and Report for this specification will be published on October 3, 2008. If you are reading this after that date, please download the available specification from the OMG Specifications Catalog.

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# Preface

## About the Object Management Group

### OMG

Founded in 1989, the Object Management Group, Inc. (OMG) is an open membership, not-for-profit computer industry standards consortium that produces and maintains computer industry specifications for interoperable, portable and reusable enterprise applications in distributed, heterogeneous environments. Membership includes Information Technology vendors, end users, government agencies and academia.

OMG member companies write, adopt, and maintain its specifications following a mature, open process. OMG's specifications implement the Model Driven Architecture® (MDA®), maximizing ROI through a full-lifecycle approach to enterprise integration that covers multiple operating systems, programming languages, middleware and networking infrastructures, and software development environments. OMG's specifications include: UML® (Unified Modeling Language™); CORBA® (Common Object Request Broker Architecture); CWM™ (Common Warehouse Metamodel); and industry-specific standards for dozens of vertical markets.

More information on the OMG is available at <http://www.omg.org/>.

## OMG Specifications

As noted, OMG specifications address middleware, modeling and vertical domain frameworks. A catalog of all OMG Specifications is available from the OMG website at:

[http://www.omg.org/technology/documents/spec\\_catalog.htm](http://www.omg.org/technology/documents/spec_catalog.htm)

Specifications within the Catalog are organized by the following categories:

### OMG Modeling Specifications

- UML
- MOF
- XMI
- CWM
- Profile specifications

### OMG Middleware Specifications

- CORBA/IIOP
- IDL/Language Mappings
- Specialized CORBA specifications
- CORBA Component Model (CCM)

### Platform Specific Model and Interface Specifications

- CORBA services

- CORBA facilities
- OMG Domain specifications
- OMG Embedded Intelligence specifications
- OMG Security specifications.

All of OMG's formal specifications may be downloaded without charge from our website. (Products implementing OMG specifications are available from individual suppliers.) Copies of specifications, available in PostScript and PDF format, may be obtained from the Specifications Catalog cited above or by contacting the Object Management Group, Inc. at:

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Email: [pubs@omg.org](mailto:pubs@omg.org)

Certain OMG specifications are also available as ISO standards. Please consult <http://www.iso.org>

## Typographical Conventions

The type styles shown below are used in this document to distinguish programming statements from ordinary English. However, these conventions are not used in tables or section headings where no distinction is necessary.

Times/Times New Roman - 10 pt.: Standard body text

**Helvetica/Arial - 10 pt. Bold:** OMG Interface Definition Language (OMG IDL) and syntax elements.

**Courier - 10 pt. Bold:** Programming language elements.

Helvetica/Arial - 10 pt: Exceptions

**Note** – Terms that appear in *italics* are defined in the glossary. Italic text also represents the name of a document, specification, or other publication.

## Issues

The reader is encouraged to report any technical or editing issues/problems with this specification to <http://www.omg.org/technology/agreement.htm>.

# 1 Scope

The specification is designed to move the evolution of the Federal Transition Framework into the general community of the OMG (industrial, governmental, and academic). The initial standard is therefore based on the existing release of the Federal Transition Framework released by the President's Office of Management and Budget.

A key aspect of this specification is to move the FTF specification's primary representation from an XML Schema representation to a Platform Independent Model of the FTF semantics from which the XML Schema is derived as a Platform Specific Model. This opens the evolution of the FTF to its expression in multiple technologies (Platform Specific Models) going forward.

# 2 Conformance

Implementations of this specification will conform with the semantics expressed in the platform independent model, and in particular, will be able to generate and/or consume XML documents that are conformant with the XML Schemas specified for the Federal Transition Framework (referenced in Clause 8).

## 2.1 Changes to Existing OMG Specifications

No changes to existing OMG standards are required in support of this specification.

# 3 Normative References

<b>OMG Document:</b>	gov/2007-09-04
<b>Title:</b>	Federal Transition Framework Specification
<b>Description:</b>	A "zip" file of the documents comprising the FTF Specification. These files contain minor changes from the original Revised Submission as suggested by the OMG Architecture Board.

The following files are in the above zip file, comprising the specification.

<b>File:</b>	FTF-Submission.doc
<b>Title:</b>	Federal Transition Framework Submission - Specification Document
<b>Description:</b>	Submission (this document) to the OMG's Federal Transition Framework RFP

**File:** FTF-CMOF-XMI-PIM.xml  
**Title:** Federal Transition Framework Submission - CMOF XMI  
**Description:** The CMOF representation of the platform independent model in XMI format. The definitive specification of the Federal Transition Framework Platform Independent Model.

**File:** FederalTransitionFramework.xsd  
**Title:** Federal Transition Framework Submission - Federal Transition Framework XML Schema PSM  
**Description:** The XMI-compliant XML Schema representation of the FTF platform specific model generated from the Platform Independent Model (gov/2007-08-02).

**File:** OrganizationStructure.xsd  
**Title:** Federal Transition Framework Submission - Organization Model XML Schema PSM  
**Description:** The XMI-compliant XML Schema representation of the “Organization” platform specific model generated from the Platform Independent Model (gov/2007-08-02). This supports formal organizational references in the FTF. It is based on work emerging from the OMG’s BMIDTF, though highly subsetted to only the elements needed.

**File:** FTF-Subset-of-FEACRM.xsd  
**Title:** Federal Transition Framework Submission - FTF Subset of the Federal Enterprise Architecture Consolidated Reference Model XML Schema PSM  
**Description:** A subset of the XMI-compliant XSD representation of the FEA CRM platform specific model in gov/2007-08-04. It contains only the elements of the CRM that are referenced explicitly in the FTF XML Schema (gov/2007-08-03). Only this subset is submitted as a normative portion of the FTF Specification.

## 4 Terms and Definitions

Terms and definitions of the Federal Transition Framework are defined in the context of the models in which they occur in Clause 7 and 8.

The terms and definitions of the Federal Enterprise Architecture Consolidated Reference models are found in two official US documents:

1. The FEA Consolidated Reference Models, Version 2.2  
[http://www.whitehouse.gov/omb/egov/documents/FEA\\_CRM\\_v22\\_Final\\_July\\_2007.pdf](http://www.whitehouse.gov/omb/egov/documents/FEA_CRM_v22_Final_July_2007.pdf)

2. The Data Reference Model, Version 2.0  
[http://www.whitehouse.gov/omb/egov/documents/DRM\\_2\\_0\\_Final.pdf](http://www.whitehouse.gov/omb/egov/documents/DRM_2_0_Final.pdf).

The following non-technical terms need particular note.

- FTF – In this specification “FTF” always is interpreted as the Federal Transition Framework... it never means ‘Finalization Task Force.’
- OMB – is the US President’s Office of Management and Budget (it’s not a “typo” of “OMG”)

## 5 Symbols and Typographical Conventions

The specification is presented in standard UML 2.0 notation. The specification has three principal packages (see Clause 7). Orange-colored types are those defined by the FTF; green types are defined by the FEA Consolidated Reference Model, and yellow-colored types represent person or organization types.

## 6 Additional Information

### 6.1 Acknowledgements

The following companies submitted and/or supported this specification:

#### Submitters

- Adaptive
- MEGA International
- Model Driven Solutions
- Telelogic AB
- Troux Technologies

#### Supporters

- Everware-CBDI
- RedHat, Inc.
- TethersEnd Consulting
- US Department of Treasury
- US National Archives and Records Administration
- US President’s Office of Management and Budget
- Unisys



# 7 Structural Overview

## 7.1 Platform Independent Model

The Platform Independent Model (PIM) is fully specified in OMG Document: gov/2007-08-02, “Federal Transition Framework Submission - CMOF XMI,” the CMOF representation of the platform independent model in XMI format. This constitutes the definitive specification of the Federal Transition Framework Platform Independent Model

The model was specified using the UML modeling tool, MagicDraw v12.5. Though not formally part of this specification, the model has been posted to OMG Document gov/2007-08-09. The diagrams included in this document were generated from that model as were the XML Schemas which are designated as the Platform Specific Models of this specification. (See Clause 3, “Normative References”).

## 7.2 Federal Enterprise Architecture Consolidated Reference Models (FEA-CRM)

The FTF is constructed to facilitate as well as take advantage of the FEA-CRM. The Federal Enterprise Architecture Framework Reference Models defines five layers of enterprise architecture called “Reference Models” (Performance, Business, Data, Service Component, and Technology). The FTF similarly has layers (discussed below in Section 7.3, “FTF Layers”). Some FTF entities reference FEA-CRM entities. However, there is no formal model of the FEA-CRM. It is primarily a textually specified model (with the exception of the Data Reference Model, DRM, discussed below.)

As a lemma to formalizing these relationships, the specification provides a model of the FEA-CRM derived from the textual document. The FEA-CRM document is a mixture of meta-level and instance level specification. The FEA-CRM model developed as part of this specification addresses only the meta-level and is therefore not a full rendition of the FEA-CRM. There is no commitment by any governmental agency to adopt this as “the” model of the FEA-CRM. The model will serve as a focal point for discussions of possible future work in the Government DTF and to provide the model needed to “tie” the FTF to the FEA-CRM, consistent with its intent.

An exception to the mixture of meta and instance levels in the FEA-CRM is the Data Reference Model (DRM). It is specified as a meta-model and is rendered in this work faithfully.

Since the FTF uses only a subset of the DRM, an additional XML Schema is provided which has only that subset in it. This will prevent the clutter of extraneous entities that will not be used in the generation or consumption of FTF documents.

## 7.3 FTF Layers

The FTF has five layers corresponding to those in the FEA-CRM (above). In addition to those layers, the design of the FTF also incorporates the idea of EA Cross-Agency Initiatives, described in the previous section. The six layers of the FTF are:

- Initiative: Describes a specific federal cross-agency initiative represented in the FTF, including initiative deliverables, approved implementation guidance for agencies and any communities of interest supporting the CAI.
- Strategy and Performance: Describes the outcomes, objectives and mandates representing the strategic goals of a given CAI, aligned to the FEA Performance Reference Model
- Business: Describes the common business processes and initiatives specific to the CAI, aligned to the FEA Business Reference Model

- **Data:** Describes the common information exchange packages, data repositories and standards of a given CAI, which are structured using the framework of the FEA Data Reference Model (version 2.0)
- **Service Component:** Describes the common shared IT services, components and component repositories specific to a given CAI, aligned to the FEA Service Component Reference Model
- **Technology:** Describes the common technology standards, government off-the-shelf products and shared licensing opportunities specific to a given CAI, aligned to the FEA Technical Reference Model.

The following diagram (Figure 7.1) provides an overview of the relationships among the layers, and the entity types existing within each layer. The layers are organized from top to bottom in the order described above. Orange-colored types are those defined by the FTF; green types are defined by the FEA Consolidated Reference Model, and yellow-colored types represent person or organization types.



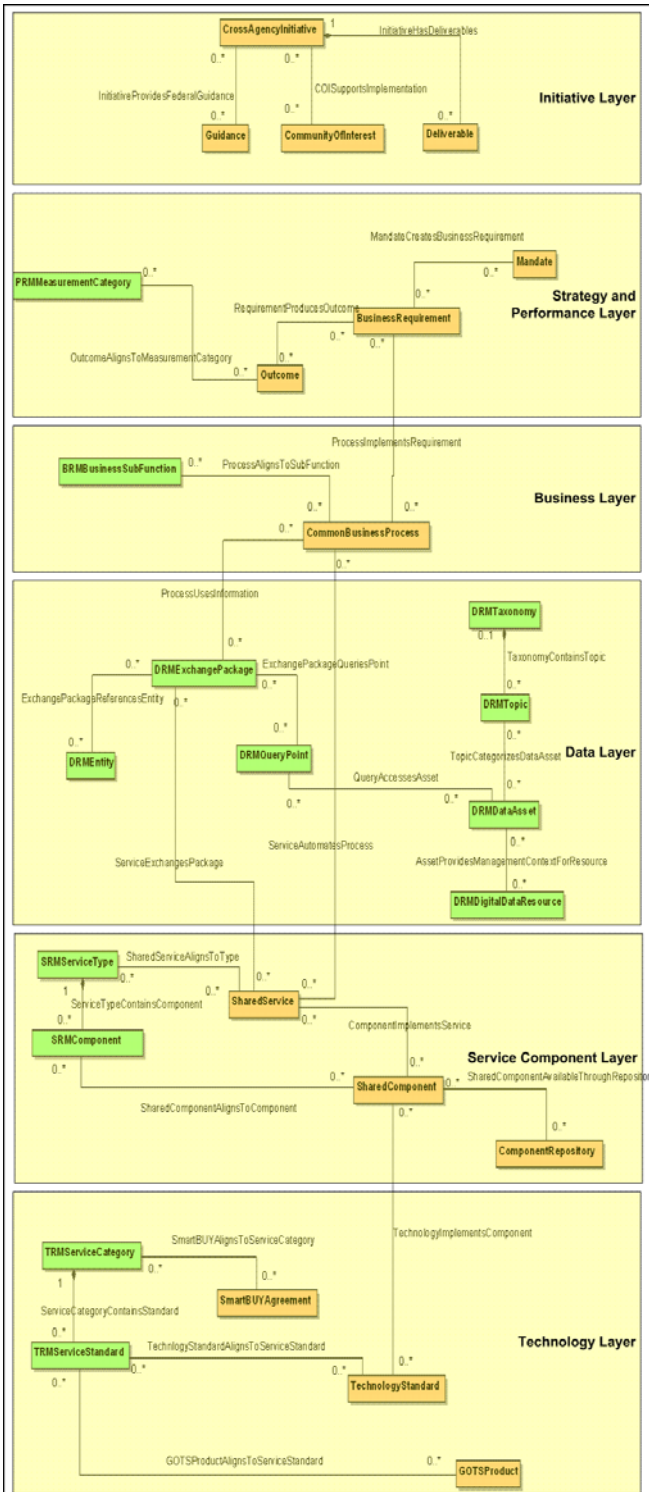


Figure 7.1 - Overview of the Federal Transition Framework

The details of each layer are provided in sub clause 7.6.

## 7.4 Organization Model

In addition to modeling the FEA-CRM in support of the FTF, a terse Organization Model was designed to move implicit relationships to Organization units out of text attributes. It is a highly subsetted derivation of emerging work of the BMI DTF.

## 7.5 Common Object Attributes

There is a set of entity attributes common to all entity types in the FTF, with the exception of the types derived from the FEA Consolidated Reference Model, and the Party type. These attributes are listed below.

<b>Attribute</b>	<b>Type</b>	<b>Description</b>
Name	String	Instance name. Should be brief and natural, and it should uniquely identify the entity instance.
Description	String	Brief description of the entity instance
URL	String	Internet Uniform Resource Locator that provides additional information pertinent to a specific object within the FTF.

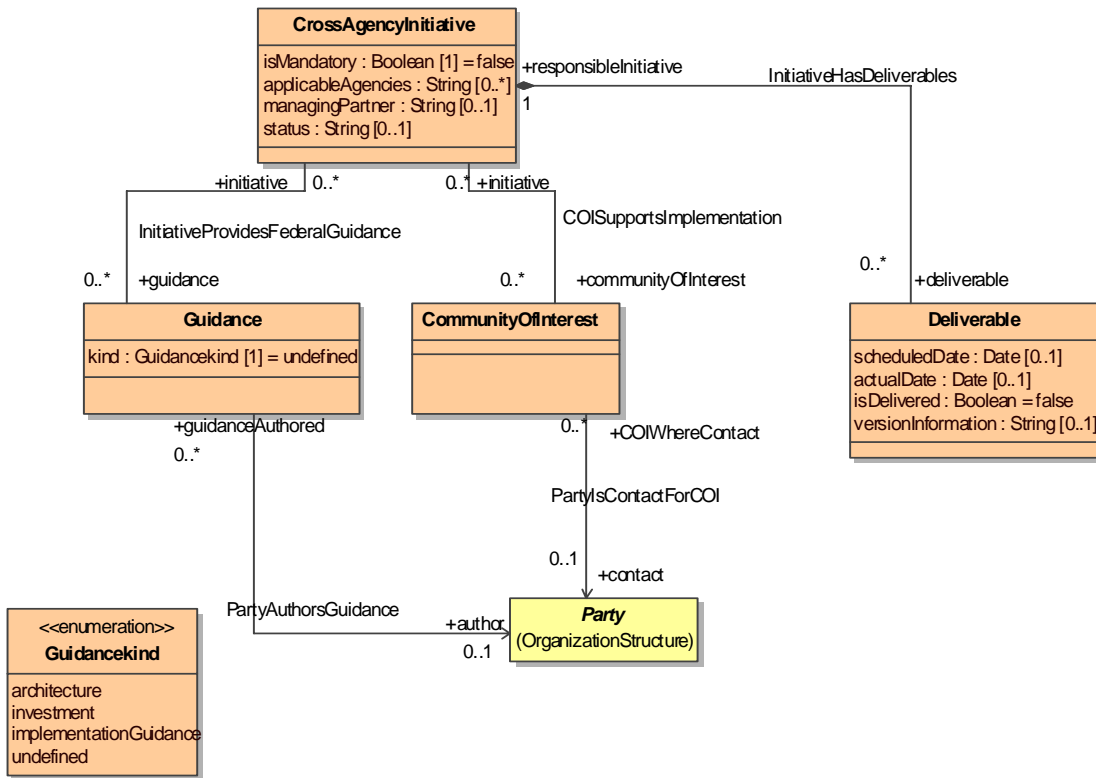
The common attributes are not repeated in the descriptions unless there is a special provision for how the attribute is used with a particular entity.

# 8 FTF Metamodel Elements by Layer

## 8.1 Initiative Layer

The Initiative Layer describes important elements of common federal cross-agency initiatives including:

- The initiatives themselves
- Relevant sources of federal guidance
- Communities of interest within the Federal government providing support to agencies implementing the initiative
- Deliverables produced by the initiative that may be of value to agencies



<b>Entity Name</b>	Cross-Agency Initiative (CAI)
<b>Entity Description</b>	Describes a common federal initiative or IT management requirement
<b>Relationships</b>	Deliverable, Community of Interest, Guidance

<b>Examples</b>	IPv6, IT Infrastructure Optimization LOB, Grants LOB, e-Authentication Service Component	
<b>Entity Source</b>	OMB	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
Mandatory / Informational	True/False	Agencies are expected to incorporate the FTF Catalog content for all CAIs designated as Mandatory, providing that the CAI is relevant to the agency's lines of business (see "Applicable Agencies"), below. Non-Mandatory CAIs are designated as Informational, meaning that agencies may elect to incorporate the FTF content for that CAI into their target architectures, but are not required to do so.
Applicable Agencies	String	Describes criteria to determine which federal agencies this initiative applies to
Managing Partner	String	Name of agency responsible for managing the cross-agency initiative

<b>Entity Name</b>	Guidance	
<b>Entity Description</b>	Document(s) that provide approved federal guidance to federal agencies in implementing the CAI. The source of this guidance may be OMB, the CIO Council or other designated agencies or bodies.	
<b>Relationships</b>	Cross-Agency Initiative, Party	
<b>Examples</b>	"Integrating IPv6 into Agency EA Planning" (pub. by the CIO Council)	
<b>Entity Source</b>	OMB, CIO Council	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
Author	String	Organization responsible for producing guidance

<b>Entity Name</b>	Deliverable	
<b>Entity Description</b>	Products (including documents, models, components, and other architecture artifacts) published by the initiative that may be of benefit to individual agencies. This information can be used to generate a timeline view of the cross-agency initiative efforts.	
<b>Relationships</b>	Cross-Agency Initiative	
<b>Examples</b>	Guidance documents, architecture models, software components	
<b>Entity Source</b>	OMB, CIO Council	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>

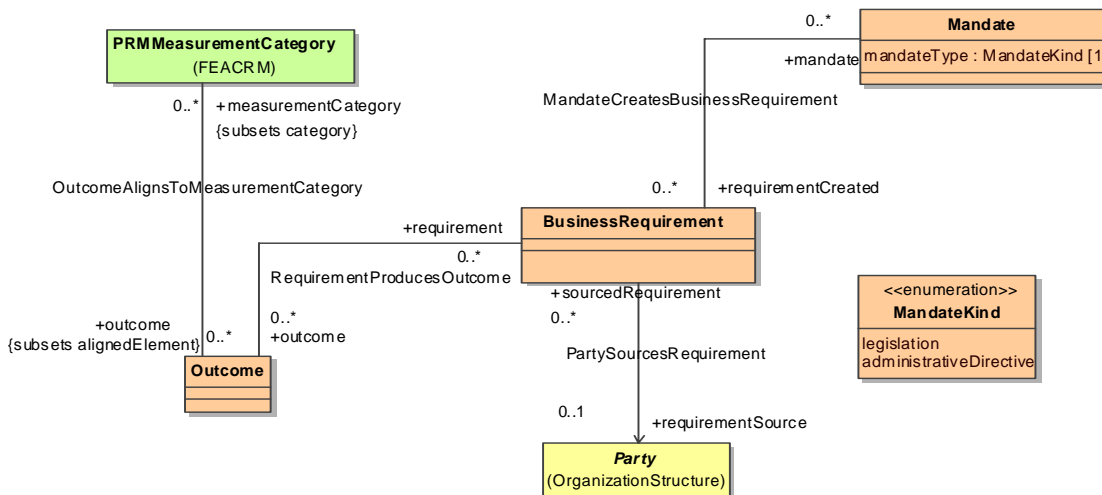
Scheduled Date	Date	Date deliverable is or was expected to be available (may be in the future)
Actual Date	Date	Date deliverable was actually made available
Is Delivered	Boolean	Whether deliverable is currently available for download and/or use by agencies
Version Information	String	Current version of the deliverable

<b>Entity Name</b>	Community of Interest	
<b>Entity Description</b>	Group established within the Federal government to promote and support implementation efforts for this CAI by Federal agencies	
<b>Relationships</b>	Cross-Agency Initiative	
<b>Examples</b>	AIC IPv6 Working Group	
<b>Entity Source</b>	Any Federal agency	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

## 8.2 Strategy and Performance Layer

The Strategy and Performance Layer describes important elements of CAIs including:

- Federal mandates for IT management and specific agency requirements associated with them.
- Expected performance outcomes for the initiative, linked to the FEA Performance Reference Model.



<b>Entity Name</b>	PRM Measurement Category	
<b>Entity Description</b>	Provides general classifications of measurement indicators within the Performance Reference Model (PRM)	
<b>Relationships</b>	Outcome	
<b>Examples</b>	Community and Social Services, Defense and National Security	
<b>Entity Source</b>	FEA Consolidated Reference Model	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

<b>Entity Name</b>	Outcome	
<b>Entity Description</b>	Measurable agency performance outcome expected as a result of initiative. Performance improvements may be in the areas of business process improvements, cost savings and cost avoidance, technology implementation or other measures as enumerated within the PRM.	
<b>Relationships</b>	Business Requirement	
<b>Examples</b>	“25% improvement in vaccination delivery schedule”	
<b>Entity Source</b>	Cross-Agency Initiative Managing Partner	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

<b>Entity Name</b>	Mandate	
<b>Entity Description</b>	Federal legislation or administrative directive that serves a source for compliance requirements for Federal agencies	
<b>Relationships</b>	Business Requirement	
<b>Examples</b>	E-Government Act, OMB Memorandum 05-22	
<b>Entity Source</b>	OMB, Congress, Policy Authority	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
<b>Type</b>	Enumeration	Indicates whether mandate is legislation or administrative directive

<b>Entity Name</b>	Business Requirement	
<b>Entity Description</b>	Specific agency requirement for compliance with this initiative that derives from a Mandate (see above). A Requirement describes a specific, measurable expectation for agency conformance.	
<b>Relationships</b>	Outcome, Mandate, Party	
<b>Examples</b>	"...all agencies' infrastructure (network backbones) must be using IPv6, and agency networks must interface with this infrastructure, by June 30, 2008."	
<b>Entity Source</b>	OMB, Congress, Policy Authority	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
Requirement Source	String	Mandate instituting the requirement

### 8.3 Business Layer

The Business Layer encompasses entities and relationships pertaining to cross-agency business activities, including:

- Common cross-agency business processes defined by the CAI for their line of business.
- Linkage to the FEA Business Reference Model.
- Linkage to related strategic requirements, shared services, and information exchange packages.



<b>Entity Name</b>	BRM Business Subfunction	
<b>Entity Description</b>	Breaks a line of business down into smaller, more concrete functions	
<b>Relationships</b>	Common Business Process	
<b>Examples</b>	Public Relations, Record Retention	
<b>Entity Source</b>	FEA Consolidated Reference Model	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
Number	Integer	Unique identity code assigned by FEA to each Subfunction

<b>Entity Name</b>	Common Business Process	
<b>Entity Description</b>	A business process is an activity performed by agencies that yields a result of measurable value to one or more stakeholders. Each BRM Business Subfunction can be further decomposed into multiple business processes	



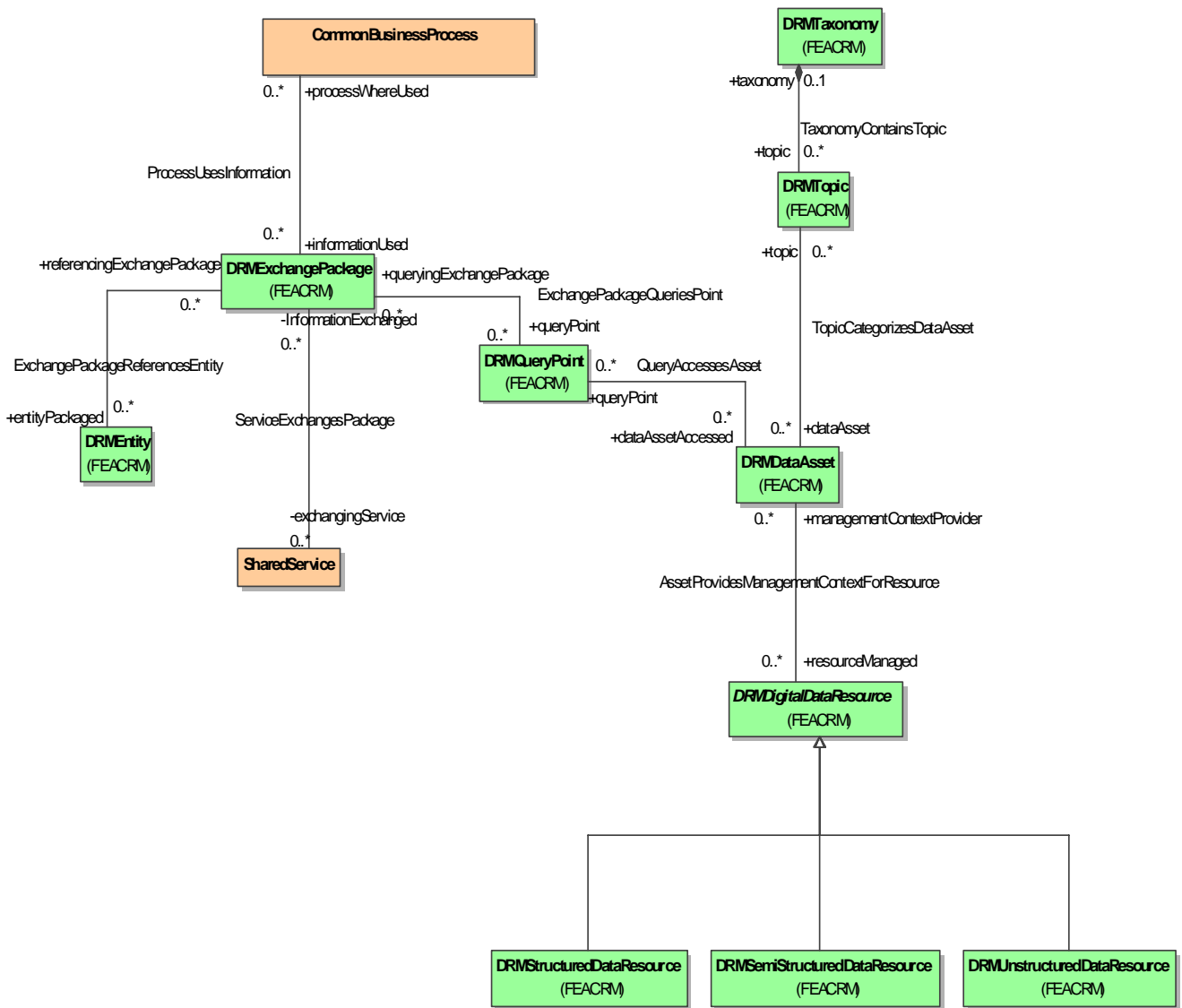
<b>Relationships</b>	BRM Business Subfunction, Business Requirement, DRM Exchange Package, Shared Service	
<b>Examples</b>	“IPv6 Address Space Acquisition”	
<b>Entity Source</b>	Cross-Agency Initiative Task Force	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
Process Owner	String	Agency formally charged with ownership of the common process

## 8.4 Data Layer

The Data layer encompasses entities and relationships pertaining to data exchanged as part of a common business process, including

- Information exchange packages defining the format for data sharing
- Data resources such as databases containing common federal data
- Data taxonomies for this cross-agency initiative

All of the entity types defined within the FTF Data Layer are defined within the FEA Data Reference Model 2.0. The entity type descriptions and attributes are taken directly from the DRM. The cross-agency initiatives are responsible for creating the instances of these types for their specific initiatives.



<b>Entity Name</b>	DRM Taxonomy
<b>Entity Description</b>	A collection of controlled vocabulary terms organized into a hierarchical structure. Taxonomies provide a means for categorizing or classifying information within a reasonably well-defined associative structure. Each term in a taxonomy is in one or more parent/child (broader/narrower) relationships to other terms.
<b>Relationships</b>	DRM Topic

<b>Examples</b>	A taxonomy expressed in W3C Web Ontology Language (OWL) format.	
<b>Entity Source</b>	FEA Data Reference Model 2.0	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

<b>Entity Name</b>	DRM Topic	
<b>Entity Description</b>	A category within a Taxonomy. A Topic is the central concept for applying context to data. For example, an agency may have a Taxonomy representing their organizational structure. In such a Taxonomy, each role in the organizational structure (e.g., CIO) represents a Topic. Topic is often synonymous with “node.”	
<b>Relationships</b>	DRM Taxonomy, DRM Data Asset	
<b>Examples</b>	Country	
<b>Entity Source</b>	FEA Data Reference Model 2.0	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

<b>Entity Name</b>	DRM Data Asset	
<b>Entity Description</b>	A managed container for data. In many cases, this will be a relational database; however, a Data Asset may also be a Web site, a document repository, directory, or data service.	
<b>Relationships</b>	DRM Topic, DRM Digital Data Resource, DRM Query Point	
<b>Examples</b>	Relational databases, web services, directory, document repository	
<b>Entity Source</b>	FEA Data Reference Model 2.0	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
Type	String	Type of Data Asset – e.g., database, Web site, registry, directory, data service, etc.
Geospatial Enabled	True/False	Designates whether or not the Data Asset supports or provides Geospatial data.

<b>Entity Name</b>	DRM Digital Data Resource	
<b>Entity Description</b>	A digital container for information, which may be stored in structured, semi-structured or unstructured forms. This type is further subtyped into Structured, Semi-Structured, and Unstructured Data Resource, as per the DRM 2.0.	
<b>Relationships</b>	DRM Data Asset	
<b>Examples</b>	Relational databases, semi-structured data files, unstructured documents.	
<b>Entity Source</b>	FEA Data Reference Model 2.0	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
Type	Enumeration	Type of Resource – structured, semi-structured or unstructured

<b>Entity Name</b>	DRM Query Point	
<b>Entity Description</b>	An endpoint providing an interface for accessing and querying a Data Asset. A concrete representation of a Query Point may be a specific URL at which a query Web Service may be invoked. A Query Point returns a result set specified in an Exchange Package.	
<b>Relationships</b>	DRM Data Asset, DRM Exchange Package	
<b>Examples</b>	“http://www.example.com/querypoint3”	
<b>Entity Source</b>	FEA Data Reference Model 2.0	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
Query Languages	String	A stipulation of the query languages supported by a Query Point (e.g., SQL-92, CQL (Z39.50), XQuery, HTTP GET, etc.).

<b>Entity Name</b>	DRM Exchange Package	
<b>Entity Description</b>	A description of a specific recurring data exchange between a supplier and a consumer. An Exchange Package contains information (metadata) relating to the exchange (such as Supplier ID, Consumer ID, validity period for data, etc.), as well as a reference to the Payload (message content) for the exchange. An Exchange Package can also be used to define the result format for a query accepted and processed by a Query Point in a data sharing scenario.	
<b>Relationships</b>	Common Business Process, DRM Entity, DRM Query Point, Shared Service	
<b>Examples</b>	Electronic Healthcare Record	
<b>Entity Source</b>	FEA Data Reference Model 2.0	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>

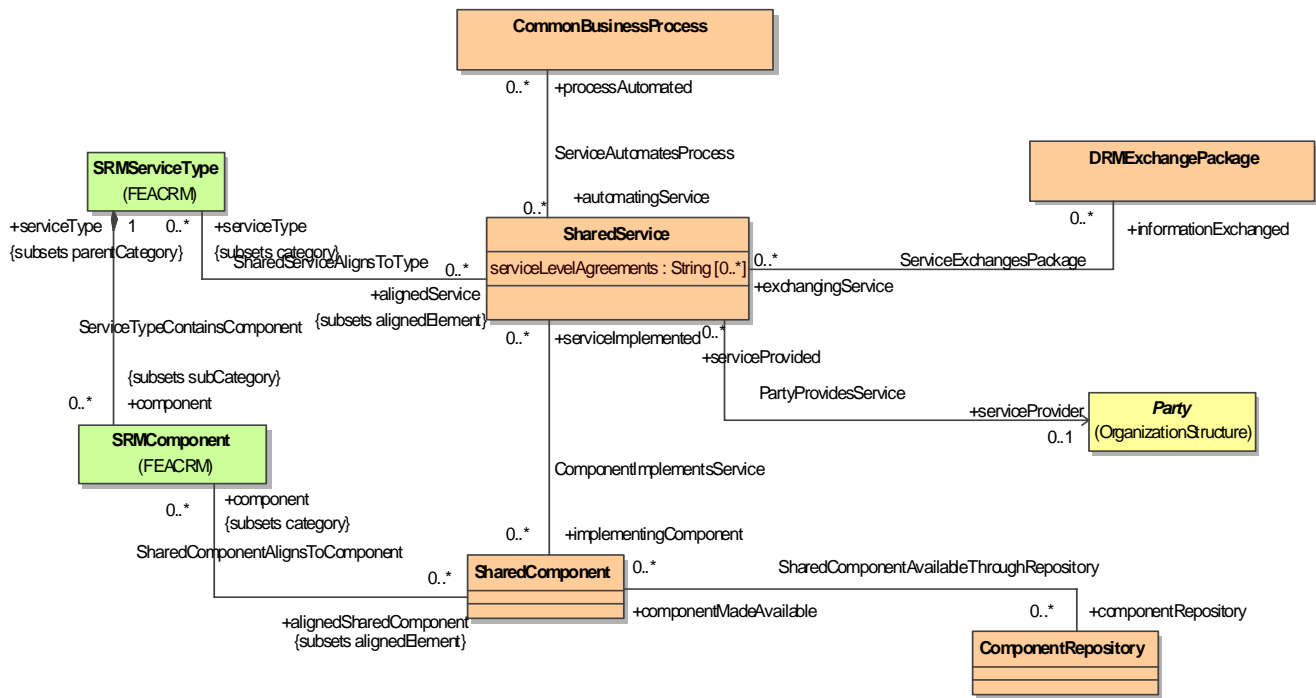
Classification	String	The security classification for an Exchange Package.
Frequency	String	The frequency at which the exchange occurs

<b>Entity Name</b>	DRM Entity	
<b>Entity Description</b>	An abstraction for a person, place, object, event, or concept described (or characterized) by common Attributes. For example, “Person” and “Agency” are Entities. An instance of an Entity represents one particular occurrence of the Entity, such as a specific person or a specific agency.	
<b>Relationships</b>	DRM Exchange Package	
<b>Examples</b>	Person, Agency	
<b>Entity Source</b>	FEA Data Reference Model 2.0	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

## 8.5 Service Component Layer

The Service Component Layer encompasses entities and relationships pertaining to shared IT services and components utilized by the CAI, including

- Shared IT services (e.g., Grants.gov)
- Potentially shareable service components (e.g., e-Authentication)
- Relevant Federal repositories of components for this CAI (e.g., Core.gov)



<b>Entity Name</b>	SRM Service Type	
<b>Entity Description</b>	Defines the second level of detail describing a business-oriented service	
<b>Examples</b>	Tracking and Workflow, Routing and Scheduling	
<b>Relationships</b>	SRM Component, Shared Service	
<b>Entity Source</b>	FEA Consolidated Reference Model	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

<b>Entity Name</b>	SRM Component	
<b>Entity Description</b>	A self contained business process or service with predetermined functionality exposed through a business or technology interface	
<b>Relationships</b>	SRM Service Type, Shared Component	
<b>Examples</b>	Process Tracking, Case Management, Conflict Resolution	

<b>Entity Source</b>	FEA Consolidated Reference Model	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

<b>Entity Name</b>	Shared Service	
<b>Entity Description</b>	Shared services are federal e-government implementations such as Line of Business Centers of Excellence or other services shared across multiple agencies	
<b>Relationships</b>	SRM Service Type, Common Business Process, DRM Exchange Package, Party, Shared Component	
<b>Examples</b>	HR Centers of Excellence	
<b>Entity Source</b>	Line of Business or E-Government Initiative	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
Service Level Agreements	String	Description of service level agreements established for this service
Service Provider	String	Name of organization providing the shared service

<b>Entity Name</b>	Shared Component	
<b>Entity Description</b>	Logical “building blocks” of a shared service	
<b>Relationships</b>	SRM Component, Component Repository	
<b>Examples</b>	e-Authentication	
<b>Entity Source</b>	Line of Business or E-Government Initiative	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

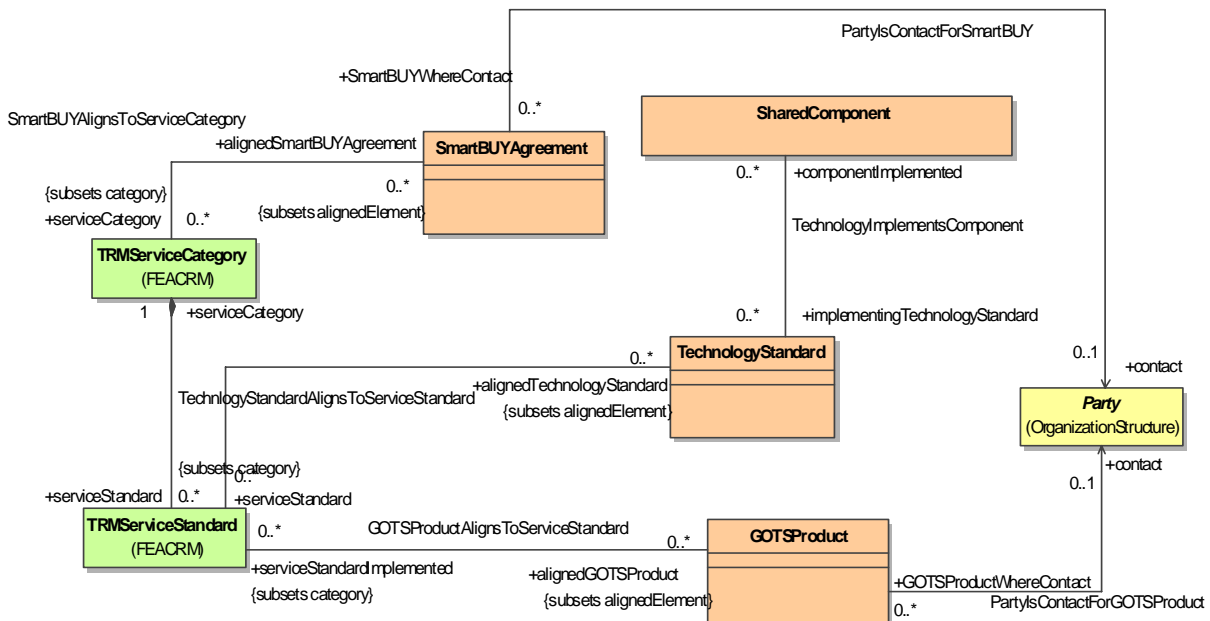
<b>Entity Name</b>	Component Repository	
<b>Entity Description</b>	Online service hosting components for reuse by federal agencies	
<b>Relationships</b>	Shared Component	
<b>Examples</b>	CORE.gov	
<b>Entity Source</b>	Line of Business or E-Government Initiative	

Unique Attributes	Type	Description
No additional attributes		

## 8.6 Technology Layer

The Technology Layer encompasses entities and relationships pertaining to common Federal technology infrastructure elements, including:

- Technology specifications, including NIST standards and approved industry standards
- Government off-the-shelf (GOTS) applications
- Approved SmartBUY licensing agreements for this CAI



<b>Entity Name</b>	TRM Service Category	
<b>Entity Description</b>	Used to classify lower levels of technologies, standards, and specifications in respect to the business or technology function they serve.	
<b>Relationships</b>	TRM Service Standard, SmartBUY Agreement	
<b>Examples</b>	Access Channels, Service Transport	
<b>Entity Source</b>	FEA Consolidated Reference Model	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		



<b>Entity Name</b>	TRM Service Standard	
<b>Entity Description</b>	Used to define the standards and technologies supporting the Service Category.	
<b>Relationships</b>	TRM Service Category, Technology Standard, GOTS Product	
<b>Examples</b>	Web Browser, Wireless/PDA	
<b>Entity Source</b>	FEA Consolidated Reference Model	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

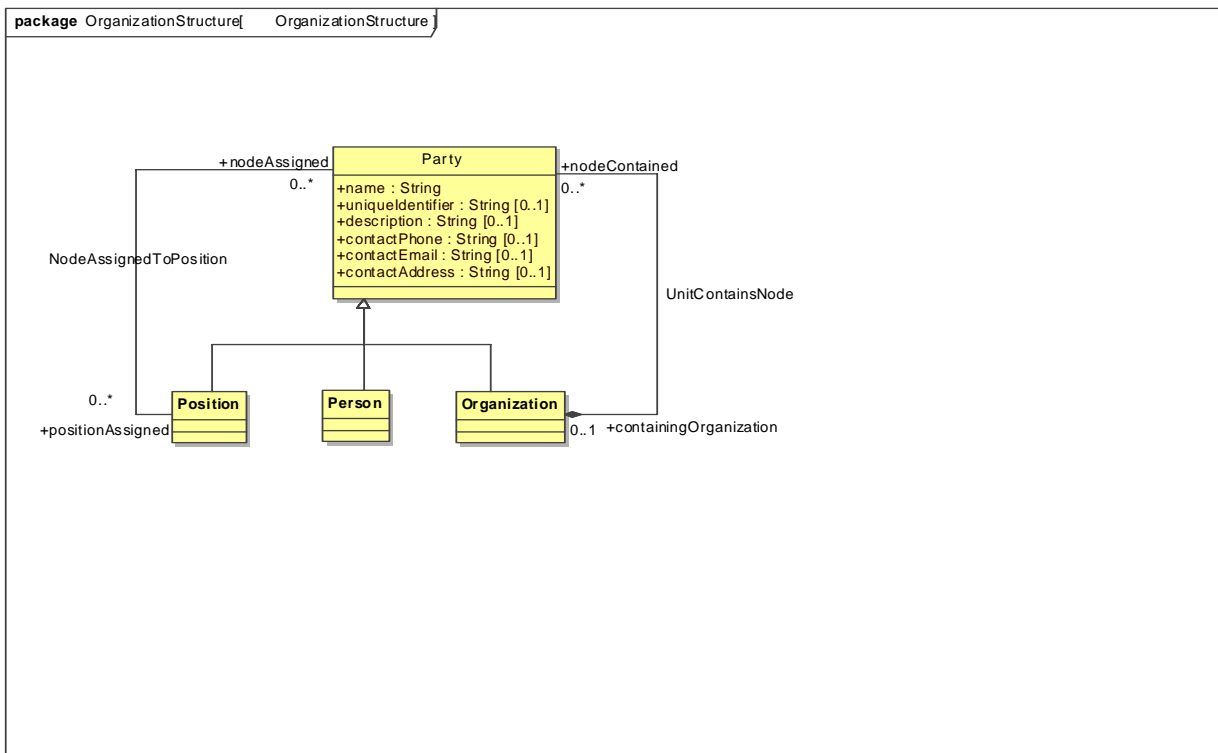
<b>Entity Name</b>	Technology Standard	
<b>Entity Description</b>	Approved federal technologies, standards, and specifications in respect to the business or technology function they serve.	
<b>Relationships</b>	TRM Service Standard, Shared Component	
<b>Examples</b>	NIST Standards, Voluntary Consensus Standards	
<b>Entity Source</b>	OMB	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

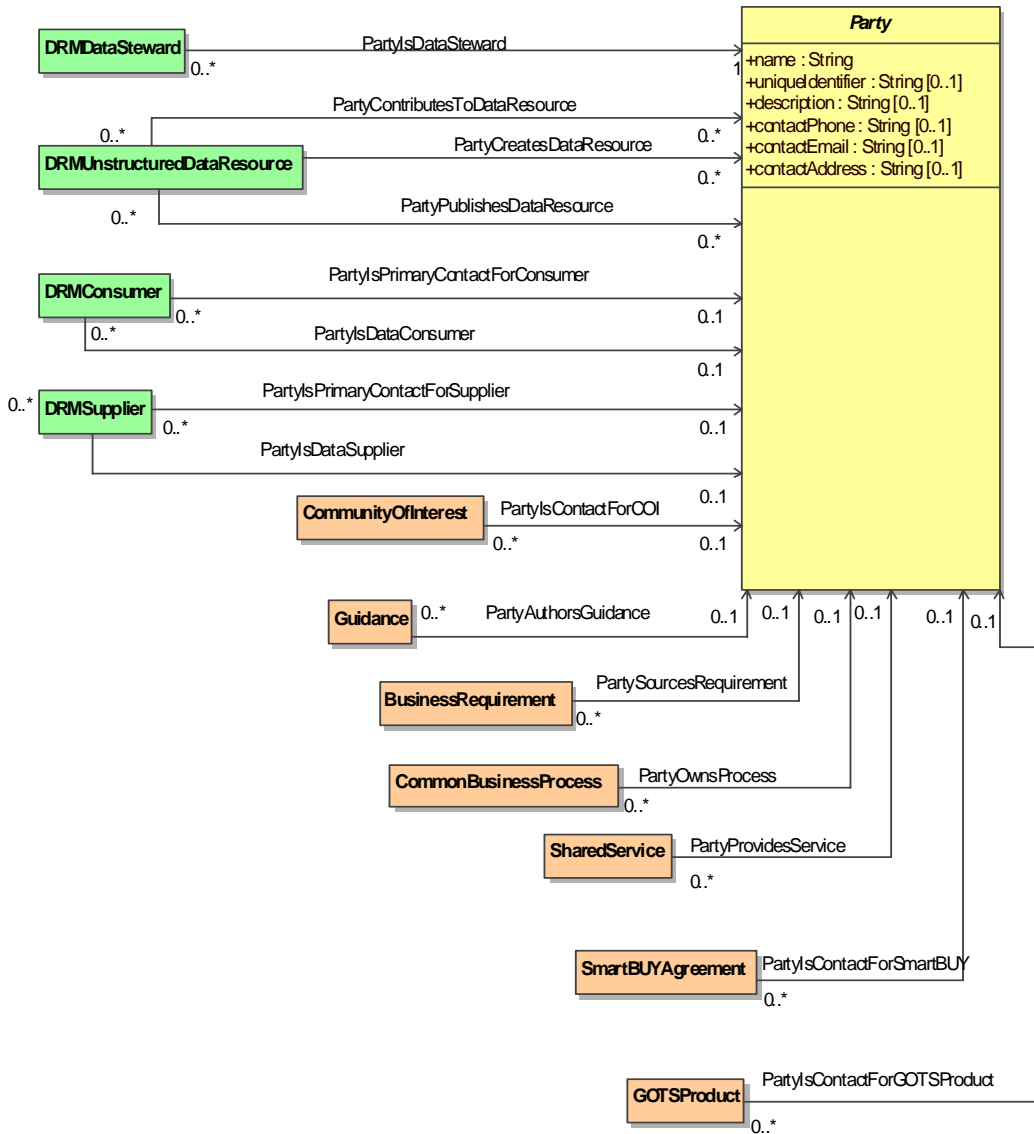
<b>Entity Name</b>	GOTS Product	
<b>Entity Description</b>	Government off-the-shelf technology products agencies can utilize without the payment of license fees. Note: the inclusion of a GOTS product within the FTF does not mandate agencies adopt this product, or prefer it to a commercial product (unless otherwise specified); it merely indicates a product is available for usage by agencies should they elect to do so.	
<b>Relationships</b>	TRM Service Standard, Party	
<b>Examples</b>	e-CPIC	
<b>Entity Source</b>	Any Federal agency	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

<b>Entity Name</b>	SmartBUY Agreement	
<b>Entity Description</b>	Government-wide blanket purchase agreement for specific vendors approved under the OMB SmartBUY program.	
<b>Relationships</b>	TRM Service Category, Party	
<b>Examples</b>	Prosight, Oracle	
<b>Entity Source</b>	OMB	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>
No additional attributes		

## 8.7 Other Types

One additional type has been added to the FTF Metamodel to represent persons and organizations consistently as entities within the metamodel. This type is known as Party:





<b>Entity Name</b>	Party	
<b>Entity Description</b>	Person or organization associated with some other type defined in the FTF metamodel	
<b>Examples</b>	John Smith, Bureau of Industry	
<b>Entity Source</b>	OMB	
<b>Unique Attributes</b>	<b>Type</b>	<b>Description</b>

Contact Phone	String	Individual contact for agreement
Contact E-Mail	String	E-mail address of contact
Contact Address	String	Individual contact for community

## Annex A - List of Acronyms

Abbreviation	Notes
Chips	Clearing House Inter-Bank Payments System <a href="http://www.chips.org">www.chips.org</a>
CLS	Continuous Linked Settlement <a href="http://www.cls-services.com">http://www.cls-services.com</a>
FATF	The FATF is an inter-governmental body whose purpose is the development and promotion of national and international policies to combat money laundering and terrorist financing.
FIX	Financial Information eXchange <a href="http://www.fixprotocol.org">http://www.fixprotocol.org</a>
FpML	Financial products Markup Language) is the industry-standard protocol for complex financial products. <a href="http://www.fpml.org">http://www.fpml.org</a>
IFX	Interactive Financial eXchange <a href="http://www.ifxforum.org">www.ifxforum.org</a>
Giovannini	The Giovannini Group is a group of financial-market participants, under the chairmanship of Alberto Giovannini (chairman - Unifortune Asset Management SGR), which advises the European Commission on financial market issues.
MDDL	Market Data Definition Language <a href="http://www.mddl.org">www.mddl.org</a>
MiFID	MiFID will replace the existing Investment Services Directive (ISD), the most significant European Union legislation for investment intermediaries and financial markets since 1995.
Omgeo	Omgeo plays a core role as the orchestrator of post-trade pre-settlement trade management within the global securities industry <a href="http://www.omgeo.com">www.omgeo.com</a>
RTGS	Real-Time Gross Settlement
RIXML	RIXML.org is a consortium of buy-side and sell-side firms that has established an open standard for investment and financial research. <a href="http://www.rixml.org">www.rixml.org</a>
Sepa	Single Euro Payments Area
Swift	Society for Worldwide Interbank Financial Telecommunication supplies secure messaging services. <a href="http://www.swift.com">http://www.swift.com</a>

Target2	TARGET2 is to become a system that provides extensively harmonized services via an integrated IT infrastructure, improves cost-efficiency, is prepared for swift adaptation to future developments, including the enlargement of the Eurosystem. <a href="http://www.ecb.int/paym/target/target2/html/index.en.html">http://www.ecb.int/paym/target/target2/html/index.en.html</a>
Twist	Transaction Workflow Innovation Standards Team <a href="http://www.twiststandards.org">www.twiststandards.org</a>
Unifi	UNIversal Financial Industry message scheme (ISO20022) <a href="http://www.iso20022.org">www.iso20022.org</a>
XBRL	XBRL is a language for the electronic communication of business and financial data. <a href="http://www.xbrl.org">http://www.xbrl.org</a>