



European Committee for Standardization  
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CEN/ISSS WS/BII17

## **Multi Party Catalogue**

### **PROFILE DESCRIPTION**

**Business Domain:** Post award procurement

**Business Process:** Sourcing

**Document Identification:** CEN/ISSS WS/Profile BII17

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## Document Summary

The Multi-party Catalogue profile describes a process providing electronic messaging support for the business process called “sourcing” in the post-awarding phase of public procurement.

The key aspects covered by this profile are:

- To enable a Contracting authority to request catalogue information for one or many Suppliers for a particular item or item group.
- To enable a Catalogue Provider to provide such information in a single document (one request will result in one catalogue being provided). Generally the Catalogue Provider is a repository that has compiled catalogue information from several suppliers.

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# 1 Preamble

The CEN/ISSS Workshop on business interoperability interfaces for public procurement in Europe (CEN/ISSS WS/BII) was established in order to

- Identify and document the required business interoperability interfaces related to pan-European electronic transactions in public procurement expressed as a set of technical specifications, developed by taking due account of current and emerging UN/CEFACT standards in order to ensure global interoperability;
- Co-ordinate and provide support to pilot projects implementing the technical specifications in order to remove technical barriers preventing interoperability.

To facilitate implementation of electronic commerce in a standardized way, thereby enabling the development of standardized software solutions as well as efficient connections between business partners without case by case specification of the data interchange, the workshop agreed to document the required business interoperability interfaces as profile descriptions. The end goal is to reduce the cost of implementing electronic commerce to a level that is economical for small and medium size companies and institutions.

## 1.1 Profile description

A profile description is a technical specification describing

- the choreography of the business process(es) covered, i.e. a detailed description of the way the business partners collaborate to play their respective roles and share responsibilities to achieve mutually agreed goals with the support of their respective information systems,
- the electronic business transactions exchanged as part of the business process and the sequence in which these transactions are exchanged,
- the business rules governing the execution of that business process(es), its business collaborations and business transactions, as well as any constraints on information elements used in the transaction data models
- the information content of the electronic business transactions exchanged by pointing to a given data model for each of the business transactions.

As well as determining what business transactions are used, the profile restricts their content in terms of elements and the cardinality of elements. The key standardization aspect of the profile description is thus on the organisational and semantics interoperability levels rather than on syntax within the technical interoperability level. Consequently the business transactions within a profile can be structured based on different message standards/syntax as long it contains all the necessary data elements.

Although the profile descriptions and transaction data models provided by CEN BII will be neutral of syntax, the workshop has agreed to provide specifications of how its data models may be mapped to defined syntaxes. This is done in order provide the market with implementable specifications.

It should be noted that the profile description does not attempt to address issues related to topics such as:

- the actual transmission of the electronic messages,
- security and confidentiality of the message exchange,
- integrity, authentication and auditing of information content or
- the process of implementing a solution based on the profile description.

These issues have however been addressed by other deliverables of the CEN/ISSS WS/BII (see section 2 for reference to relevant documents).

The main focus of the profile description and the associated transaction data models is to address generally expressed business requirements applicable throughout the European market. Although the profile description and associated transaction data model are designed to meet generally expressed requirements, it is still the responsibility of the users to ensure that the actual business transactions exchanges meets all the legal, fiscal and commercial requirements relevant to their business.

## 2 References

### External documents

- UN/CEFACT Modelling Methodology (available at <http://www.untmg.org/specifications/>)
- UMM Meta Model – Foundation Module Version 1.0, Technical Specification, 2006-10-06
- UMM Meta Model – Base Module Version 1.0, Technical Specification, 2006-10-06
- UML (Unified Modelling Language), version 2.0
- UN/CEFACT ebXML Core Components Technical Specifications version 2.01 – ISO 15000-5
- UN/CEFACT Business Requirements Specification version 1.5 (CEFACT/ICG/005)

### Related publications from CEN/ISSS WS/BII:

- CWA xxxx-1: Profile Overview
- CWA xxxx-1, annex A: Glossary of terms
- CWA xxxx-1, annex B: Profile Architecture
- CWA xxxx-1, annex C: Controlled Vocabulary Approach
- CWA xxxx-2: UBL-UN/CEFACT convergence (WG2)
- CWA xxxx-3: Toolbox Requirements (WG3)
- CWA xxxx-4: Pilot Support (WG4)

## 3 Business benefits and requirements

### 3.1 Business benefits

The main business benefits to be gained by implementing this profile are following:

Aspect	Beneficiary	Benefit
Automated request	Contracting Authority	Contracting authority can automatically send a request for a new catalogue to the central catalogue service manager
Automated request	Catalogue Provider	Catalogue Provider can automatically confirm the acceptance of the catalogue (and later on using the Catalogue Profiles processes and business transactions can send a structured catalogue)
Information quality	Contracting Authority	Accuracy of information received
Information quality	Catalogue Provider	Accuracy of information received Accuracy of information sent to Contracting Authority.
Information quality	Catalogue Provider	Accuracy of information sent
Products range	Contracting Authority	Wider product range potentially available to Contracting authorities.
	Catalogue Provider	Wider product range that Economic operators can offer (for Dynamic Purchasing Systems)

### 3.2 Business requirements

1. The Multi Party Catalogue may only apply to one Customer but there may be one or many Suppliers.
2. The Multi Party Catalogue must contain all information necessary for its use.
3. It should be possible to reference the Multi Party Catalogue transactions to a framework agreement or any other contract or agreement.
4. It should be possible to state which supplier(s) the catalogue transactions should cover.
5. The Multi Party Catalogue acceptance and rejection applies to the whole document
6. The Catalogue Provider sends an electronic Catalogue transaction that can be received and processed by the Catalogue Receiver.
7. The Multi Party Catalogue transaction must support:
  - Integrity, authentication and auditing of information content
  - Item price comparison.
  - Specification of:
    - Item components.
    - Item accessories.
    - Required (additional) items.
    - Replacement items.
    - Complementary items.
8. Seasonal pricing of the same item by specifying different prices depending on specific validity periods.
9. Specification of the type of tax applicable to an item in a specific location.

10. Identification of items by specification of their attributes and dimensions.
11. Identification of item instances.
12. Multi Party Catalogue request must specify the item classification of goods that are interested by the requests (e.g. UN/SPSC, ecl@ss, CPV, proficl@ss etc.). This allows identifying goods/services easily when a specific catalogue concept is not used by the Supplier.

## 4 Profile detailed description

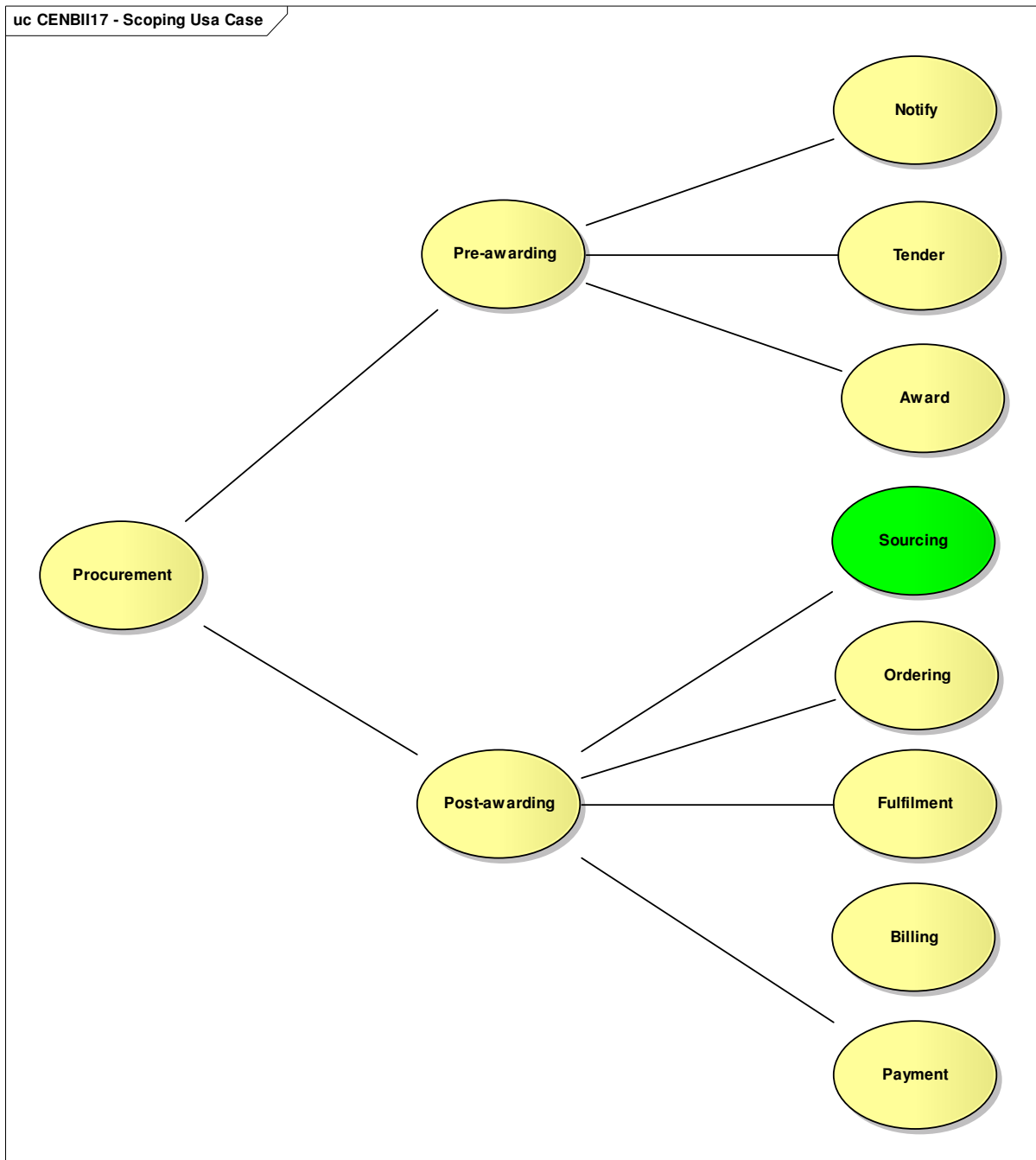
### 4.1 Context

The specification contained in this document is relevant within the following context:

<b>Categories</b>	<b>Description and Values</b>
Business Process	Sourcing.
Product Classification	All types of goods and services.
Industry Classification	Buyer and Seller organisations in all sectors, public and private.
Geopolitical	Europe.
Official Constraint	EU Directive 2004/17/EC and 2004/18/EC
System Capabilities	None specific.

## 4.2 Business processes in scope

Procurement is a complex domain with several key processes, some of which are illustrated in the following figure.



The Multi party Catalogue profile covers the business processes highlighted in the above figure.

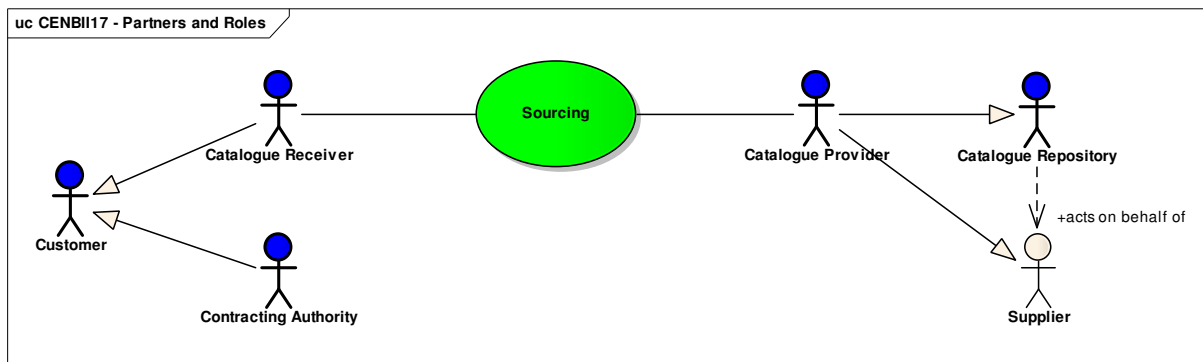
## 4.3 Partners and authorized roles

The following business partners participate in this profile, acting in the roles as defined below.

Business partner	Description
Supplier	The supplier is the legal person or organization who provides a product or service. Examples of supplier roles: seller, consignor, creditor, economic operator.

Customer	<p>The customer is the legal person or organization who is in demand of a product or service.</p> <p>Examples of customer roles: buyer, consignee, debtor, contracting authority.</p>
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Role/actor	Description
Catalogue Receiver	<p>One that receives a document that has been sent.</p> <p>In the context of this profile it is the party who issues the request for catalogue and subsequently receives the multi party catalogue document.</p>
Catalogue Provider	<p>One that provides a document that is sent.</p> <p>In the context of this profile it is normally a catalogue repository that provides the multi party catalogue document.</p>
Repository	<p>A party that collects and stores information and makes it available fully or partially to another party.</p> <p>Example is Catalogue repository.</p>
Contracting authority	<p><b>'Contracting authorities'</b> means the State, regional or local authorities, bodies governed by public law, associations formed by one or several of such authorities or one or several of such bodies governed by public law.</p> <p>A 'body governed by public law' means any body:</p> <ul style="list-style-type: none"> <li>(a) established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character;</li> <li>(b) having legal personality; and</li> <li>(c) financed, for the most part, by the State, regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities, or by other bodies governed by public law.</li> </ul> <p>This term has a narrower scope than the term "Customer" and is in BII treated as a customer role.</p>
Buyer	<p>The buyer is the legal person or organization acting on behalf of the customer and who buys or purchases the goods or services.</p> <p>If the Catalogue Receiver party is not the party eventually buying the items in the catalogue, it is possible to specify the buyer party. One that receives a document that has been sent.</p> <p>If the catalogue is not available to all Customers, a specific buyer party must be specified at catalogue document level only.</p> <p>Also known as Purchasing Manager.</p>

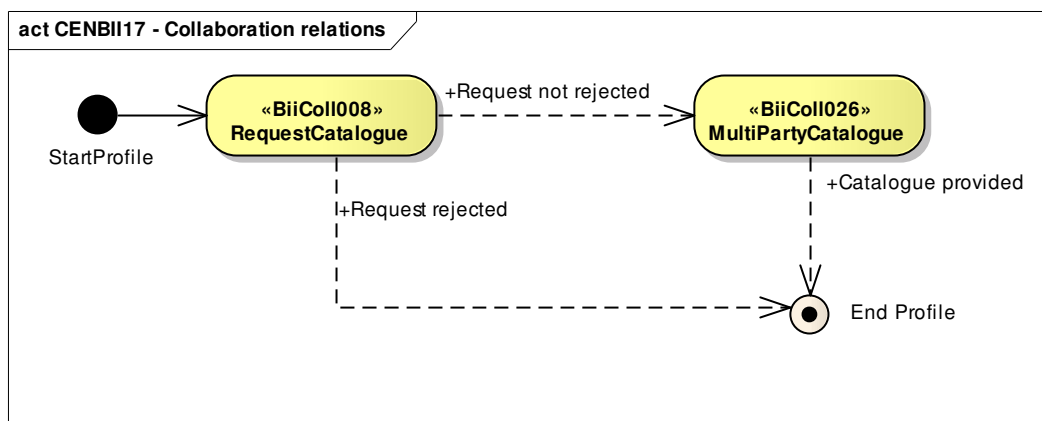


## 4.4 Choreography of business collaborations

Each business process in scope contains within itself one or more business collaborations:

Business Process	Business Collaboration(s)	Collaboration ID
Sourcing	RequestCatalogue	BiiColl008
	MultiPartyCatalogue	BiiColl026

The following diagram shows the relationships (i.e. links) between the collaborations of each business process implemented by the profile. The choreography of business collaborations defines the sequence of interactions when the profile is run within its context. Each sequence of interactions can be understood as a run-time scenario.



Description	<p>The Catalogue Receiver requests information for a certain catalogue or a group of items in a specific category.</p> <p>The Catalogue Receiver receives and processes the Request for Catalogue.</p> <p>The Catalogue Provider compiles a Multi Party Catalogue transaction for the items or group of items, listing items from one or more suppliers.</p> <p>The Catalogue Provider sends the Multi Party Catalogue transaction to the Catalogue Receiver.</p>
Pre-conditions	Catalogue Provider has received and compiled catalogue information from one or more suppliers.
Post-conditions	Catalogue Receiver has received catalogue information on which orders can be based.
Remarks	None

### 4.4.1 Profile business rules

#### 4.4.1.1 Business rules

1. It is the Sellers responsibility that data contained in the catalogue transaction is valid.
2. The seller is obligated to provide catalogue transactions updating goods when attributes of goods change in the targeted catalogue.
3. It is the Buyers responsibility to compile received catalogue transactions into a catalogue.
4. It is the Buyers responsibility that catalogue-trade is based on a catalogue containing all corrections, additions and deletions from the suppliers catalogue transactions.

5. If any Catalogue transaction is received without agreement, the Catalogue transaction could be discarded by the receiver without any further action.
6. The Catalogue should be regarded as the Sellers standing offer, and the sender is thereby obligated to deliver catalogue-goods with the terms described in the catalogue.
7. A Catalogue Receiver can reject a transaction if it is not conformant with the referred agreement/contract.
8. The Catalogue Receiver can reject a transaction if it is not conform with the agreement under which the transaction is delivered
9. A Catalogue Receiver must accept and implement a transaction if it is conform with an agreement
10. When a catalogue is referenced to a contract, the Catalogue is valid as long as its referenced contract/agreement is valid.
11. Collaboration covers only one framework agreement, contract or no contract at all.

#### 4.4.1.2 Information constraints

ID	Data element	Context	Severity*	Rule description
1	Supplier on line level	Party	Soft	Should be provided when more than one supplier in catalogue document.
2	Supplier on header level	Party	Hard	May only be used when there is only one supplier.
3	Item identification	Catalogue request	Hard	The Catalogue Request document must refer to an identified items categories.

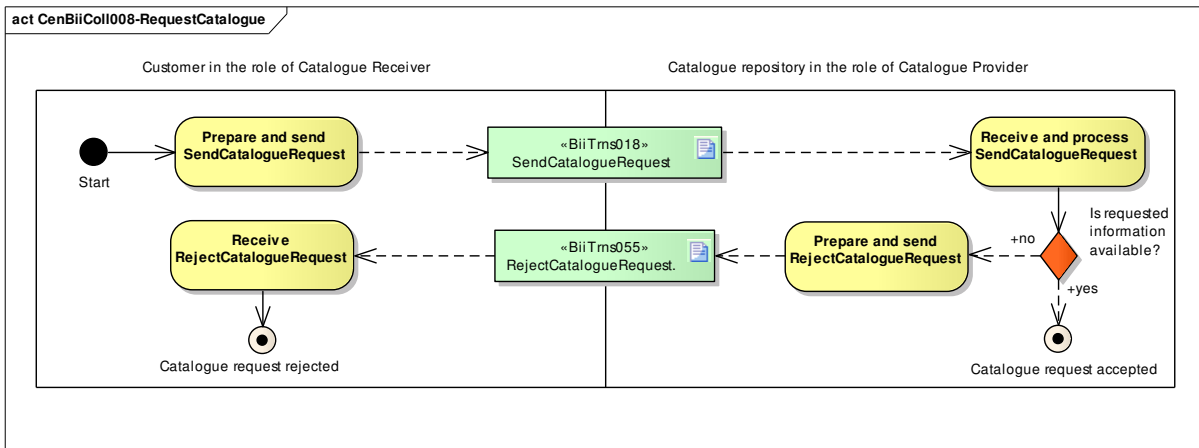
## 4.5 Business Collaboration(s) detailed description

### 4.5.1 RequestCatalogue collaboration

#### 4.5.1.1 Overview

Categories	Description and Values
Collaboration ID	BiiColl008
Description	A Customer requests a catalogue from a Catalogue provider containing information about specific items and/or types of items.
Pre condition	None specified.
Post condition(s)	<ol style="list-style-type: none"> <li>a. The Catalogue provider has accepted a request for a Catalogue.</li> <li>b. The Catalogue provider has rejected a request for a Catalogue and notified the Customer.</li> </ol>
Transactions	SendCatalogueRequest - BiiTrns018 RejectCatalogueRequest - BiiTrns055
Roles	Catalogue provider Catalogue receiver

### 4.5.1.2 Diagram



#### 4.5.1.2.1 Activity description

Role	Activity	Description
<b>Main flow</b>		<b>Post condition a</b>
Catalogue Receiver	Prepare and send SendCatalogueRequest	The Customer, as Catalogue receiver, prepares and sends a request for a Catalogue. In the request he details for what items and/or types of items he requests catalogue information.
Catalogue Provider	Receive and process SendCatalogueRequest	The Catalogue provider receives the request and after evaluating it concludes that he can sufficiently provide the requested information.  At this point he proceeds to provide the catalogue. That process is external to this collaboration.
<b>Scenario</b>	<b>Reject catalogue request.</b>	<b>Post condition b</b>
Catalogue Provider	Receive and process SendCatalogueRequest	The Catalogue provider receives the request and after evaluating it concludes that he can NOT sufficiently provide the requested information.
Catalogue Provider	Prepare and send RejectCatalogueRequest	The Catalogue provider prepares and sends a notification to the Catalogue receiver that the request is rejected.
Catalogue Receiver	Receive RejectCatalogueRequest	The Catalogue receiver receives the notification of rejection.

### 4.5.1.3 Collaboration business rules

#### 4.5.1.3.1 Process rules

1. The request for a Catalogue imposes no obligation on the Customer to purchase.
2. All information provided on header level applies to all lines.
3. Each line can specify an item reference (code/id).
4. When multiple item criteria are provided the catalogue provided should contain items that meet all criteria.
5. By returning a RejectCatalogueRequest transaction the Catalogue Provider expresses that he is not able to provide the requested catalogue.

#### 4.5.1.3.2 Information constraints

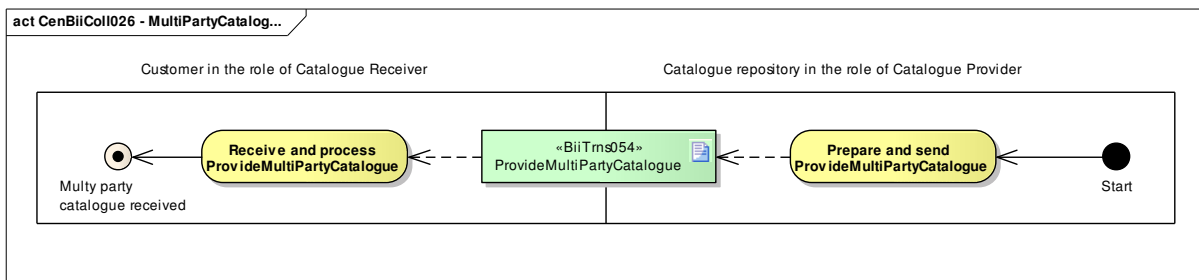
Information constraints relevant to this collaboration are captured in the referenced transaction data model(s).

## 4.5.2 MultiPartyCatalogue collaboration

### 4.5.2.1 Overview

Categories	Description and Values
Collaboration ID	BiiColl026
Description	A Catalogue Provider provides a Multi Party Catalogue to a Catalogue Receiver.
Pre condition	A Catalogue Provider has compiled catalogue information from relevant supplier(s). The Catalogue Provider has received a request from the Catalogue Receiver about what information the Multi Party Catalogue should contain.
Post condition(s)	The Catalogue Receiver has received a Multi Party Catalogue.
Transactions	ProvideMultiPartyCatalogue - BiiTrns054
Roles	Catalogue Provider Catalogue Receiver

### 4.5.2.2 Diagram



#### 4.5.2.2.1 Activity description

Role	Activity	Description
<b>Main flow</b>		
Catalogue Provider	Prepare and send ProvideMultiPartyCatalogue	The Catalogue Provider compiles catalogue information from one or more suppliers into one Multi Party Catalogue transaction in accordance with the request made by the Catalogue Receiver.
Catalogue Receiver	Receive and process ProvideMultiPartyCatalogue	The Catalogue Receiver receives and processes the Multi Party Catalogue transaction.

### 4.5.2.3 Collaboration business rules

#### 4.5.2.3.1 Process rules

6. Prices expressed in a Multi Party Catalogue must apply to one specific Customer or all.
7. If the Multi Party Catalogue information is correctly forwarded by a catalogue repository the commitment to it lies with the Supplier.
8. A catalogue transaction, when used as update transaction, may not be used to change the following information in the existing catalogue:
  - a. Catalogue ID
  - b. Catalogue Name
  - c. Catalogue issue date and time

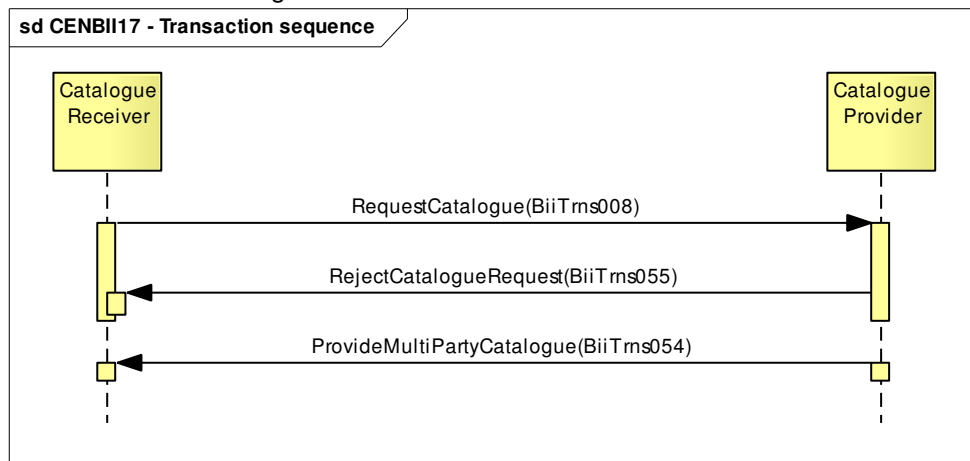
d. Catalogue provider and Catalogue Receiver.

#### 4.5.2.3.2 Information constraints

Information constraints relevant to this collaboration are captured in the referenced transaction data model(s).

## 4.6 Transaction(s) detailed description

The figure below identifies the electronic messages exchanged as part of this process and the sequence in which these documents are exchanged.



### 4.6.1 Transaction data models

Transaction	Trns ID	Data Model	Data model ID, Core - Full
SendCatalogueRequest	BiiTrns018	CatalogueRequest	BiiCoreTrdm018 - BiiFullTrdm018
RejectCatalogueRequest	BiiTrns055	CatalogueRequestRejection	BiiCoreTrdm055 - BiiFullTrdm055
ProvideMultiPartyCatalogue	BiiTrns054	MultiPartyCatalogue	BiiCoreTrdm054 - BiiFullTrdm054

Each of the identified transactions is elaborated in the following chapters.

### 4.6.2 SendCatalogueRequest transaction

Categories	Description and Values
Identifier	BiiTrns018
Description	A document produced by a party in the procurement chain that requests descriptions of items and their prices. The document provides details about what items or group of items are concerned and/or price related criteria.
Partner Types	Customer Supplier
Authorized Roles	Catalogue provider Catalogue receiver
Legal Implications	None
Initial Event	Create and send SendCatalogueRequest
Terminal event	Receive and process SendCatalogueRequest.

Categories	Description and Values
Scope	Request for any type of catalogue containing information about items available for purchase.
Boundary	None

#### 4.6.2.1 Transaction business rules

- None specified.

### 4.6.3 RejectCatalogueRequest transaction

Categories	Description and Values
Identifier	BiiTrns055
Description	A structured electronic business document to reject a Catalogue Request
Partner Types	Customer Supplier
Authorized Roles	Catalogue provider Catalogue receiver
Legal Implications	None specified.
Initial Event	Prepare and send RejectCatalogueRequest
Terminal event	Receive RejectCatalogueRequest
Scope	Catalogue based procurement in public or private sector.
Boundary	None specified.

#### 4.6.3.1 Transaction business rules

- None specified.

### 4.6.4 ProvideMultiPartyCatalogue transaction

Categories	Description and Values
Identifier	BiiTrns054
Description	A document, produced by a party in the procurement chain, which describes items and prices. The document typically enables the transmission of information regarding pricing and catalogue details for goods and services offered by one or more Sellers to a Buyer.
Partner Types	Customer Supplier
Authorized Roles	Catalogue provider Catalogue receiver
Legal Implications	None specified.
Initial Event	Create and send ProvideMultiPartyCatalogue.
Terminal event	Receive and process ProvideMultiPartyCatalogue
Scope	The ProvideMultiPartyCatalogue transaction is used to provide the Catalogue Receiver with a new catalogue that contains information on items from one or more Suppliers.

<b>Categories</b>	<b>Description and Values</b>
Boundary	Not intended for maintaining catalogue information on the Catalogue Receivers side.

#### 4.6.4.1 Transaction business rules