



European Committee for Standardization
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CEN/ISSS WS/BII01

Catalogue only

PROFILE DESCRIPTION

Business Domain: Post award procurement

Business Process: Sourcing

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Document Summary

This profile allows for establishing and maintaining a catalogue of products and/or services offered from one supplier. It is expected that this profile will typically be used not only to establish a catalogue, but also for maintenance of the information in the catalogue by adding and removing products/services from the catalogue.

This profile describes a process that allows a Supplier (or third party acting on a Supplier's behalf – Catalogue Provider) to send a Customer (or third party acting on a Customer's behalf – Catalogue Receiver) a transaction to establish or maintain a catalogue at the Customer site.

This profile allows for maintenance of a catalogue by replacing entire lines. In this case, the transaction will contain a reference to the catalogue lines that are to be added, deleted and/or updated. To facilitate this usage, the catalogue line contains an action code describing how the recipient should process the requested maintenance action.

Note: if updates of item specification or item pricing information are required in isolation from each other, refer to Profile 2:

This process is intended to result in acceptance or rejection of the transaction by the use of a business level response.

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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)
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3 Business benefits and requirements

3.1 Business benefits

The main business benefits to be gained by implementation of this profile are:

Aspect	Beneficiary	Benefit
Systemised Content	Customer	Quick and easy comparison of items from different Suppliers. Simple storage and automated maintenance of item information. Correct identification and pricing of items in the ordering process (reduced errors).
Customer Relations	Supplier	Provision of tailored item and price information. Correct identification and pricing of items in the ordering process (reduced errors)

3.2 Business requirements

1. The Supplier (or third party acting on a Supplier's behalf – Catalogue Provider) sends a transaction to establish or maintain a catalogue at the Customer site.
2. The transaction must contain all information necessary for its application i.e. it shall not rely on the availability of external references such as a centralised repository of item information. Specifically the data content of the catalogue transaction must:
 - a. Contain products/services from one Supplier only
 - b. Support Integrity, authentication and auditing of the information content
 - c. Support
 - i. Referencing a framework agreement or any other kind of contract
 - ii. Item price comparison.
 - iii. Specification of components, accessories, required (additional) items, replacement items and complementary items.
 - iv. Seasonal pricing of the same item by specifying different prices depending on specific validity periods.
 - v. Specification of the type of tax applicable to an item in a specific location.
 - vi. Identification of items by specification of their attributes and dimensions.
 - vii. Identification of item instances.
3. The Customer (or third party acting on a Customer's behalf – Catalogue Receiver) receives and evaluates the content of the transaction. The Customer informs the Supplier of his acceptance or rejection of the transaction.
4. It should be possible to reference the catalogue transactions to a single framework agreement or any other contract or agreement

4 Profile detailed description

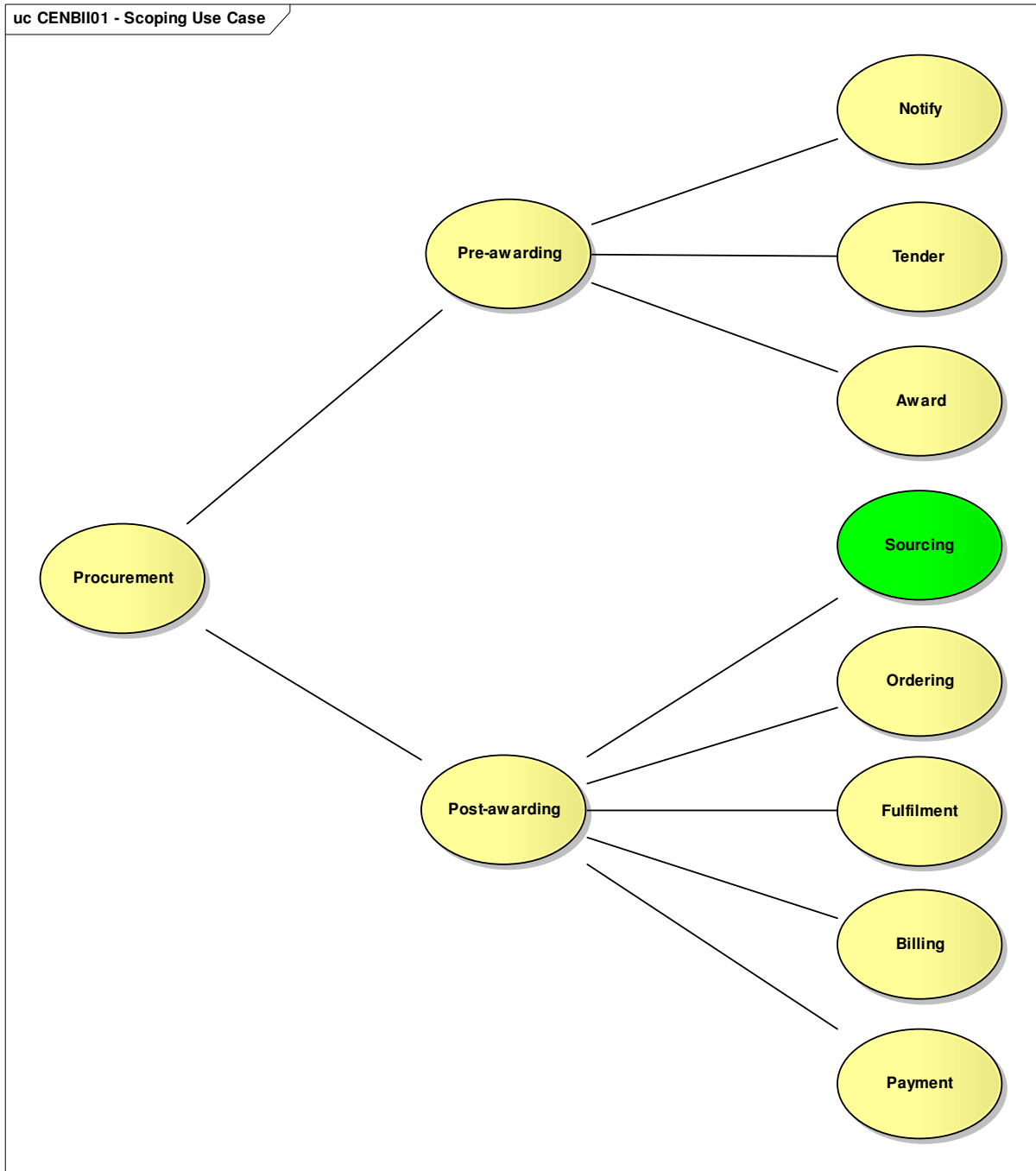
4.1 Context

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

Categories	Description and Values
Business Process	Sourcing.
Product Classification	All types of goods and services.
Industry Classification	Buyer and Seller organisations of all sizes and in all sectors, public and private
Geopolitical	Europe.
Official Constraint	None.
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 Catalogue Only profile covers the business processes highlighted in the above figure.

4.3 Business Partners and authorised roles

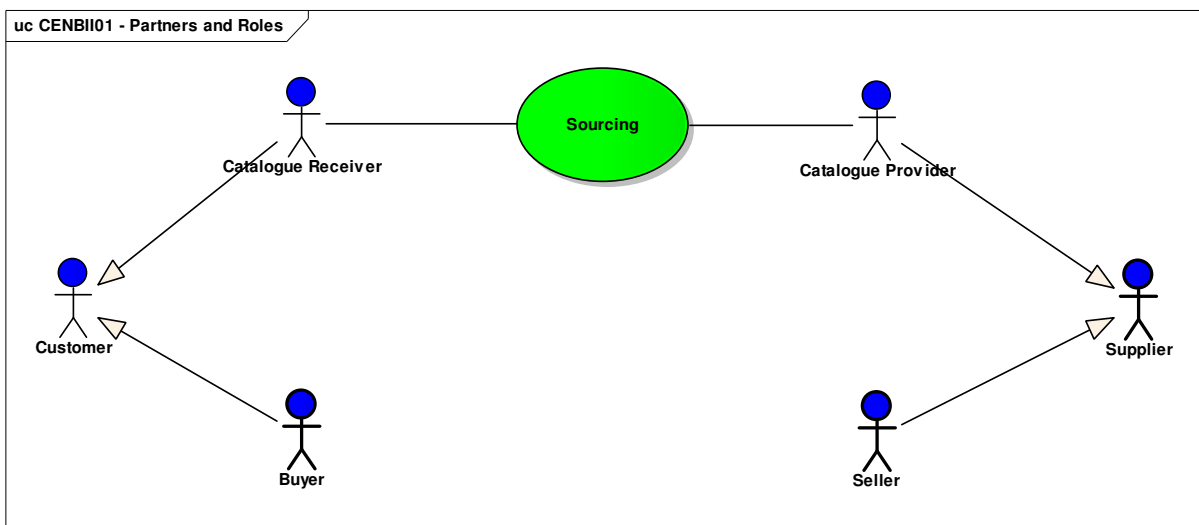
The following business partners participate in this profile, acting in the roles as defined below.

Business partner	Description
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Customer	The customer is the legal person or organization who is in demand of a product or service. Examples of customer roles: buyer, consignee, debtor, contracting authority.
Supplier	The supplier is the legal person or organization who provides a product or service. Examples of supplier roles: seller, consignor, creditor, economic operator.

Role	Description
Catalogue Provider	One that provides a document that is sent. The party providing the catalogue transaction. The Catalogue Provider can be the Supplier or a third party managing the catalogue transaction on the Supplier's behalf.
Catalogue Receiver	One that receives a document that has been sent. The party receiving the catalogue transaction. The Catalogue Receiver can be the customer or, for example, a portal or marketplace hosting or managing the catalogue on the customer's behalf.
Buyer	The buyer is the legal person or organization acting on behalf of the customer and who buys or purchases the goods or services. If the Catalogue Receiver is not the party eventually buying the items in the catalogue, it is possible to specify the Buyer party. Also known as purchasing manager.
Seller	The seller is the legal person or organization acting on behalf of the supplier and who sells goods or services to the customer. The party responsible for handling Buyer services. Also known as sales point or customer manager.

The following diagram links the business processes to the roles performed by the Business Partners.

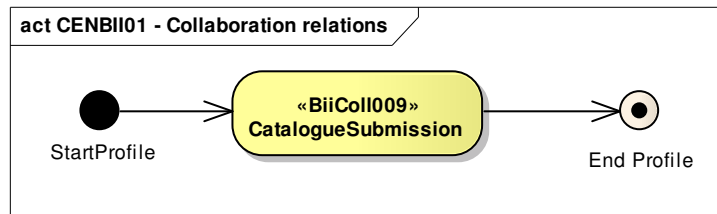


4.4 Choreography of Business Collaborations

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

Business Process	Business Collaboration(s)	Collaboration ID
Sourcing	CatalogueSubmission	BiiColl009

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 Supplier sends a legally binding electronic catalogue transaction to the Customer.</p> <p>The Customer accepts or rejects the catalogue transaction based on various external business criteria such as contract or price comparison and reports this to the Supplier by using a response.</p> <p>If the Customer accepts the catalogue transaction it notifies the Supplier and the catalogue transaction is applied into the purchasing systems by both parties and used as base for procurement, i.e. ordering and invoicing. Possibly by adding it to an existing catalogue.</p> <p>If the Supplier needs to remove individual items from an existing catalogue or add new items to it, he sends a catalogue transaction with the appropriate action code for each added or deleted item.</p> <p>The Customer accepts or rejects catalogue additions or deletions prior to their application.</p>
Pre-conditions	<p>The Customer and the Supplier have identified each other and accepted to use this profile as the basis for conducting electronic business.</p> <p>The Customer and the Supplier have established a business relation that requires catalogue information.</p>
Post-conditions	<p>The Supplier and the Customer have established identical catalogue information in their procurement systems and can use this information for ordering and invoicing and to facilitate accurate order – invoice matching.</p>
Scenarios	<ul style="list-style-type: none"> - Accepted catalogue transaction. - Rejected catalogue transaction.
Remarks	None.

4.4.1 Business rules

4.4.1.1 Process rules

1. A catalogue transaction without a stated validity period is assumed to be valid until cancelled.

2. The catalogue should be regarded as the Sellers standing offer, and the Seller is thereby obligated to supply the catalogue items according to the terms identified in the catalogue.
3. If the Catalogue Provider party is not the seller of the products, it is possible to specify Seller Party.
4. A catalogue transaction either refers to one contract/agreement or none.
5. Catalogue transactions are subordinate to the contracts/agreements on which they are based.
6. A catalogue transaction must contain an identifier for the catalogue it represents or updates.
7. It is the Sellers responsibility that data contained in the catalogue transaction is valid from a technical as well as business point of view.
8. The Seller is obligated to provide catalogue transactions updating items when item attributes change in the targeted catalogue, according to agreements.
9. It is the Buyers responsibility to compile received catalogue transactions into a catalogue and confirm action through accept.
10. The receiver can reject a transaction if it does not conform to the agreement under which the transaction is delivered.
11. A receiver must accept and implement a transaction if it conforms to an agreement.

4.4.1.2 Information constraints

- None identified.

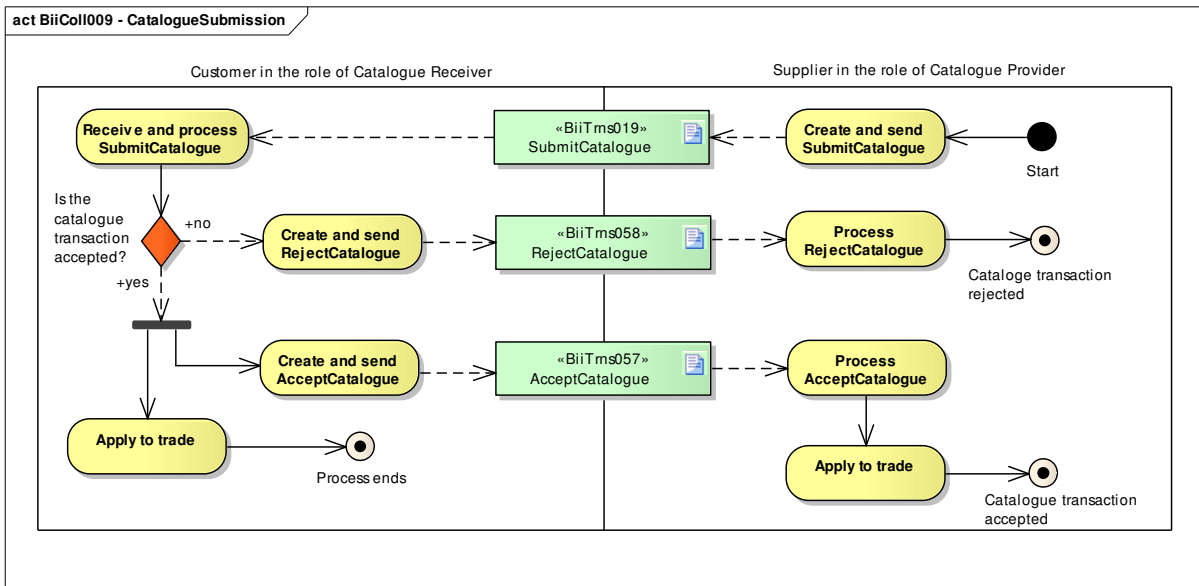
4.5 Business Collaboration(s) detailed description

4.5.1 CatalogueSubmission collaboration

4.5.1.1 Overview

Categories	Description and Values
Collaboration ID	BiiColl009
Description	A Supplier, in the role of a Catalogue Provider sends a catalogue transaction to a Customer who is in the role of a Catalogue Receiver. The Catalogue Receiver either accepts or rejects the catalogue transaction as a whole and informs the Catalogue Provider. If accepted the catalogue transaction is applied to trade.
Pre condition	None.
Post condition(s)	<ol style="list-style-type: none"> a. A catalogue provider has been notified that a catalogue transaction has been accepted and applied to trade. b. A catalogue provider has been notified that a catalogue transaction has been rejected and will not be applied to trade.
Transactions	SubmitCatalogue - BiiTrns019 AcceptCatalogue - BiiTrns057 RejectCatalogue - BiiTrns058
Roles	Catalogue provider Catalogue receiver

4.5.1.2 Diagram



4.5.1.3 Activity description

Role	Activity	Description
Main flow	Catalogue is accepted	Post condition a
Catalogue Provider	Create and send SubmitCatalogue	Catalogue Provider creates and sends a SubmitCatalogue transaction to Catalogue Receiver.
Catalogue Receiver	Receive and process SubmitCatalogue	Catalogue Receiver receives and processes the SubmitCatalogue transaction.
Catalogue Receiver	Create and send AcceptCatalogue.	Business level acceptance results in the Catalogue Receiver sending an AcceptCatalogue transaction to the Catalogue Provider.
Catalogue Receiver	Apply to trade	On sending an AcceptCatalogue response, the Catalogue Receiver applies the catalogue transaction (makes it available for trade).
Catalogue Provider	Receive and process AcceptCatalogue	Catalogue Provider receives and processes the AcceptCatalogue transaction.
Catalogue Provider	Apply to trade	On receipt of an AcceptCatalogue transaction the Catalogue Provider applies the catalogue (makes it available for trade).
Scenario	Catalogue rejected	Post condition b
Catalogue Receiver	Catalogue is rejected, create and send RejectCatalogue.	Business level rejection results in Catalogue Receiver sending a RejectCatalogue transaction to the Catalogue Provider.
Catalogue Provider	Receive and process RejectCatalogue	Catalogue Provider receives and processes RejectCatalogue transaction.

4.5.1.4 Collaboration business rules

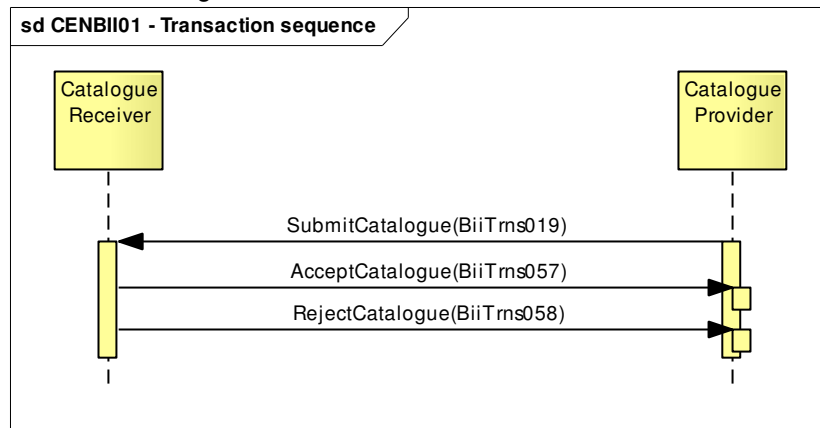
4.5.1.4.1 Process rules

1. By submitting a catalogue transaction the Supplier is committed to its content.
2. Prices expressed in a catalogue transaction must apply to one specific Customer or to all Customers (a general Catalogue).

3. A catalogue transaction without a stated validity period is assumed to valid until cancelled by the Supplier.
4. An item is allowed to have overlapping validity periods for different prices.
5. If the catalogue information is correctly forwarded by a catalogue repository the commitment to it lies with the Supplier.
6. 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. Party information.
7. A catalogue response transaction applies to the catalogue transaction as a whole.
8. By accepting a catalogue transaction the Catalogue Receiver agrees to use it as basis for trade.
9. A rejected catalogue transaction cannot be used as basis for trade.
10. By sending a RejectCatalogue the Catalogue Receiver relieves the Catalogue Provider from his commitment to the catalogue content.
11. Information constraints
12. Information constraints relevant to this collaboration are captured in the referenced transaction data model(s).
- 13.

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
SubmitCatalogue	BiiTrns019	Catalogue	BiiCoreTrdm019 - BiiFullTrdm019
AcceptCatalogue	BiiTrns057	CatalogueAcceptance	BiiCoreTrdm057 - BiiFullTrdm019
RejectCatalogue	BiiTrns058	CatalogueRejection	BiiCoreTrdm058 - BiiFullTrdm058

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

4.6.2 SubmitCatalogue transaction

Categories	Description and Values
Identifier	BiiTrns019
Description	A document produced by a party in the procurement chain that describes items and prices. The document typically enables the transmission of information regarding pricing and catalogue details for goods and services offered by a Supplier to a Customer.
Partner Types	Customer Supplier
Authorized Roles	Catalogue provider Catalogue receiver
Legal Implications	By sending a SubmitCatalogue the Catalogue Provider is legally committed by its content.
Initial Event	Create and send SubmitCatalogue.
Terminal event	Receive and process SubmitCatalogue.
Scope	The SubmitCatalogue transaction is used to establish a new catalogue and to add or remove individual items in an existing catalogue.
Boundary	None specified.

4.6.2.1 Transaction business rules

- None specified.

4.6.3 AcceptCatalogue transaction

Categories	Description and Values
Identifier	BiiTrns057
Description	A structured electronic business transaction that contains the positive results of the process of receiving and reviewing a catalogue transaction.
Partner Types	Customer Supplier
Authorized Roles	Catalogue Receiver Catalogue Provider
Legal Implications	None specified.
Initial Event	Prepare and send AcceptCatalogue
Terminal event	Receive and process AcceptCatalogue
Scope	To inform a Catalogue Provider that the catalogue was accepted.
Boundary	None specified.

4.6.3.1 Transaction business rules

- None specified.

4.6.4 RejectCatalogue transaction

Categories	Description and Values
Identifier	BiiTrns058
Description	A structured electronic business document that contains the negative results of the process of receiving and reviewing a catalogue transaction.
Partner Types	Customer Supplier
Authorized Roles	Catalogue Receiver Catalogue Provider
Legal Implications	None specified.
Initial Event	Prepare and send RejectCatalogue
Terminal event	Receive and process RejectCatalogue.
Scope	To inform a Catalogue Provider that the catalogue transaction was rejected.
Boundary	None specified.

4.6.4.1 Transaction business rules

- None specified.