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CEN/ISSS WS/BII02

Catalogue with update

PROFILE DESCRIPTION

Business Domain: Post award procurement

Business Process: Sourcing

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Document Summary

This profile allows for the maintenance of either product/service related information or price related information in an established catalogue. It is expected that this profile will typically be used where there are frequent or regular updates of product/service descriptions or price information.

This profile describes a process comprising individual transactions to make updates to existing information in a catalogue. It 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) the send specific transactions to maintain either product/service specifications (SubmitCatalogueItemUpdate) or pricing information of an existing product/service (SubmitCataloguePriceUpdate). Specifically this profile allows only:

1. Product/service specifications (not prices) to be updated in isolation via a specification update transaction (SubmitCatalogueItemUpdate)

and/or

2. Prices (not product/service specifications) to be updated in isolation via a pricing update transaction (SubmitCatalogueItemUpdate).

This process is intended to result in acceptance or rejection of the maintenance 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 requirements and benefits

3.1 Business benefits

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

Aspect	Beneficiary	Benefit
Content management	Customer and supplier	Efficient maintenance of information, specifically for large catalogues.

3.2 Business requirements

1. The Supplier (or third party acting on a Supplier's behalf – Catalogue Provider) sends a transaction to maintain information in a catalogue at the Customer site. The maintenance relates either to:
 - a. Product/service specifications (not prices),
 - or
 - b. prices (not product/service specifications)
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.
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 maintenance transaction.

4 Profile detailed description

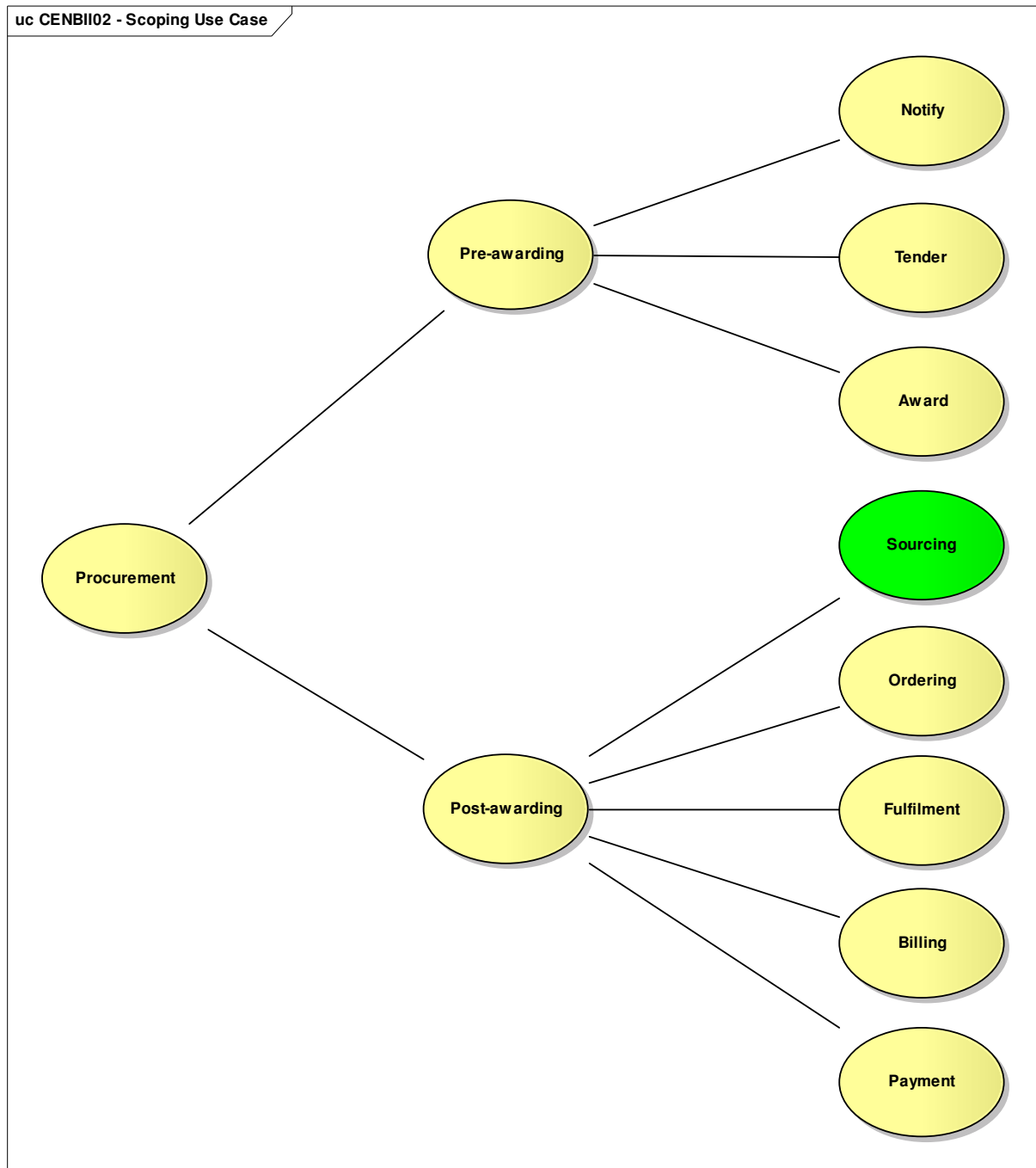
4.1 Context

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 process in scope

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



The Catalogue Update profile covers the business processes highlighted in green in the above figure.

4.3 Business Partners and authorised roles

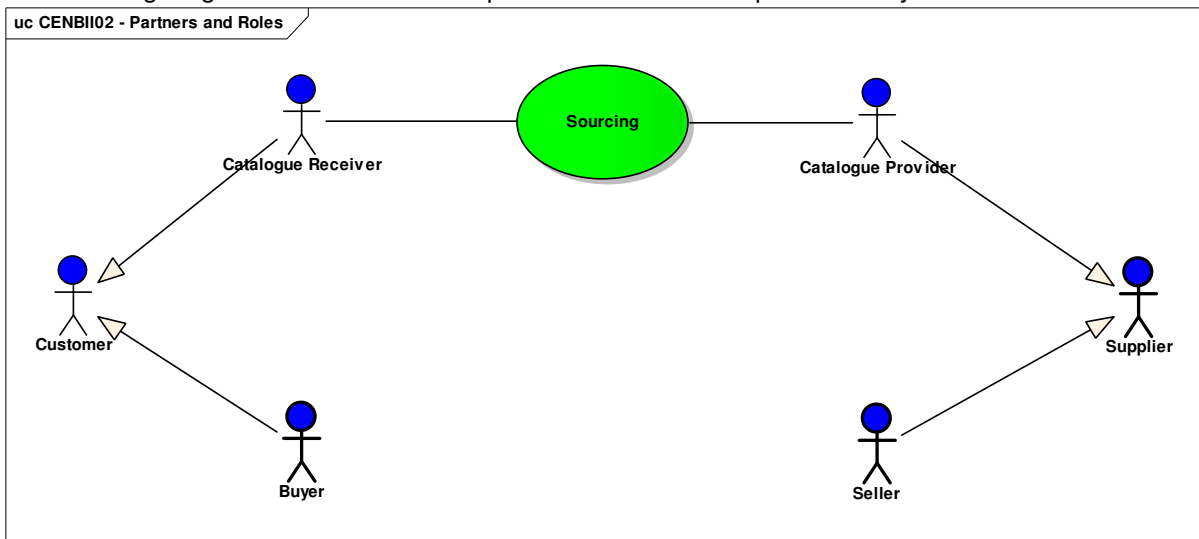
The following business partners participate in this profile, acting in the roles as defined below.

Business partner	Description
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Business partner	Description
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/actor	Description
Catalogue Provider	One that provides a document that is sent. The party providing the Catalogue Update transaction. The Catalogue Provider party can be the Supplier or a third party managing the catalogue on the Supplier's behalf.
Catalogue Receiver	One that receives a document that has been sent. The Party receiving the Catalogue Update. The Catalogue Receiver can be the Customer or, for example, a portal or marketplace hosting or managing the catalogue transaction 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.

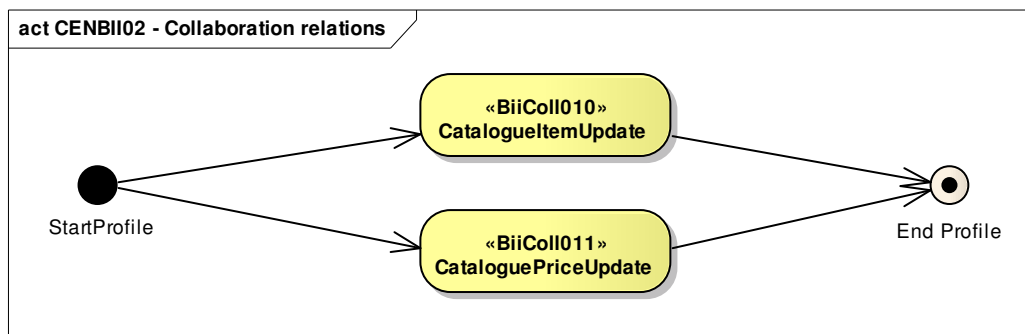


4.4 Choreography of Business Collaborations

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

Business Process	Business Collaboration(s)	Collaboration ID
Sourcing	CatalogueItemUpdate	BiiColl010
	CataloguePriceUpdate	BiiColl011

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>In the case the Supplier needs to update item information in an existing catalogue he sends a SubmitCatalogueItemUpdate transaction that references the relevant item in the catalogue.</p> <p>In the case the Supplier needs to update price information in an existing catalogue item he sends a SubmitCataloguePriceUpdate transaction that references the relevant item in the catalogue.</p> <p>Upon receiving either a SubmitCatalogueItemUpdate or SubmitCataloguePriceUpdate transaction the Customer either accepts or rejects the update and reports this to the Supplier by using a response.</p> <p>If the Customer accepts the update the relevant information in the existing Catalogue is updated and used for procurement.</p> <p>This profile is not used to remove or add items in a catalogue.</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 has a Catalogue from the Supplier which contains the Catalogue lines that require updating.</p>
Post-conditions	<p>The Supplier and the Customer have established identical Catalogue information into their procurement systems and can use this information for ordering and invoicing and to facilitate accurate order – invoice matching.</p>
Remarks	<p>This profile is not used to remove individual items from catalogue or add new items to an existing he sends a catalogue.</p>

4.4.1 Business rules

4.4.1.1 Process rules

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

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

4.4.1.2 Information constraints

- None identified.

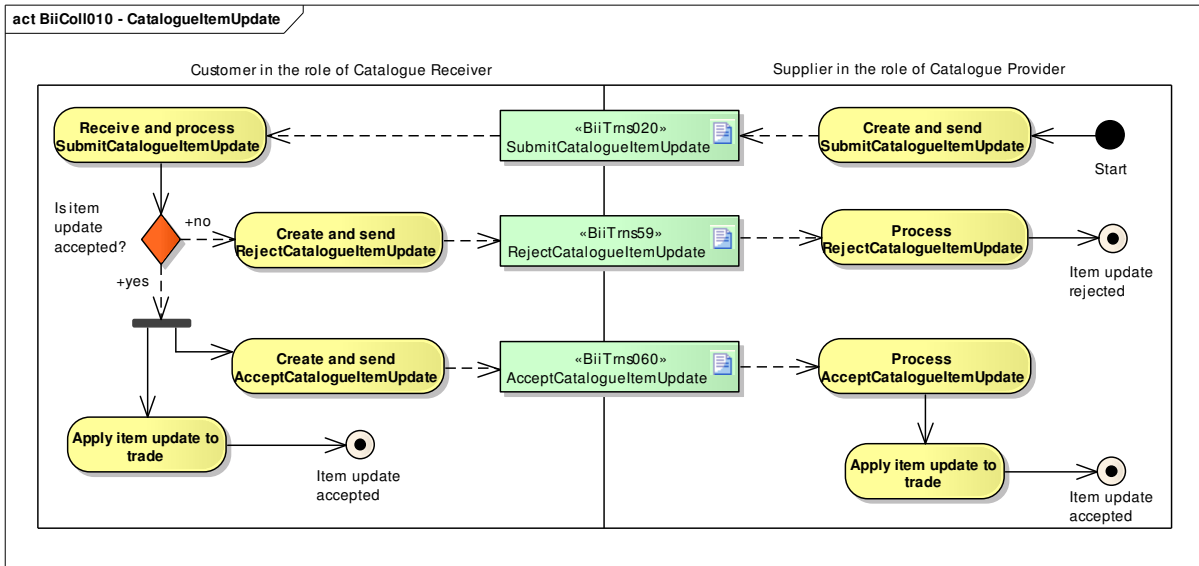
4.5 Business Collaboration(s) detailed description

4.5.1 CatalogueItemUpdate collaboration

4.5.1.1 Overview

Categories	Description and Values
Collaboration ID	BiiColl010
Description	A Supplier in the role of a Catalogue Provider sends an update to the item information in an existing catalogue and the Catalogue Receiver either accepts or rejects it.
Pre condition	A catalogue exists with the Catalogue Receiver
Post condition(s)	<ol style="list-style-type: none"> a. A Catalogue Provider has been notified by a Catalogue Receiver that a catalogue item update has been accepted and applied to trade. b. A Catalogue Provider has been notified by a Catalogue Receiver that a catalogue item update has been rejected and will not be applied to trade.
Transactions	SubmitCatalogueItemUpdate - BiiTrns020 RejectCatalogueItemUpdate - BiiTrns059 AcceptCatalogueItemUpdate - BiiTrns060
Roles	Catalogue provider Catalogue receiver

4.5.1.2 Diagram



4.5.1.3 Activity description

Role	Activity	Description
Main flow	Item update accepted	Post condition a
Catalogue Provider	Create and send SubmitCatalogueItem Update	Catalogue Provider creates and sends a SubmitCatalogueItemUpdate transaction to Catalogue Receiver.
Catalogue Receiver	Receive and process SubmitCatalogueItem Update	Catalogue Receiver receives and processes the SubmitCatalogueItemUpdate transaction.
Catalogue Receiver	Create and send AcceptItemUpdate	Catalogue Receiver accepts the SubmitCatalogueItemUpdate and creates and sends an AcceptCatalogueItemUpdate.
Catalogue Receiver	Apply item update to sales	On sending an AcceptCatalogueItemUpdate transaction the Catalogue Receiver updates the catalogue item information (makes it available for trade).
Catalogue Provider	Process AcceptCatalogueItem Update	Catalogue Provider receives and processes AcceptCatalogueItemUpdate transaction.
Catalogue Provider	Apply item update to trade	On receipt of a positive AcceptItemUpdate transaction the Catalogue Provider updates the catalogue item information (makes it available for trade).
Scenario	Item update rejected	Post condition b
Catalogue Receiver	Reject Item update. Create and send RejectCatalogueItem Update	Catalogue Receiver rejects the SubmitCatalogueItemUpdate transaction and sends a RejectCatalogueItemUpdate.
Catalogue Provider	Process RejectCatalogueItem Update	Catalogue Provider receives and processes RejectCatalogueItemUpdate transaction.

4.5.1.4 Collaboration business rules

4.5.1.4.1 Process rules

1. By sending a SubmitCatalogueItemUpdate the Catalogue Provider is legally committed by its content.
2. An item specification without a stated validity period is assumed to be valid until cancelled by the Supplier.
3. A SubmitCatalogueItemUpdate overwrites all item specification information on the relevant catalogue line.
4. A catalogue item update transaction may not be used to change the following information in an existing catalogue:
 - a. Catalogue ID.
 - b. Catalogue Name.
 - c. Catalogue issue date and time.
 - d. Party information.
5. By sending a RejectCatalogueItemUpdate transaction the Catalogue Receiver rejects to change items in the referenced catalogue lines and those lines only.
6. By sending an AcceptCatalogueItemUpdate transaction the Catalogue Receiver agrees to change items in the referenced catalogue lines and those lines only.
7. A SubmitCatalogueItemUpdate must make positive reference to an existing catalogue and the catalogue lines that are to be updated.

4.5.1.4.2 Information constraints

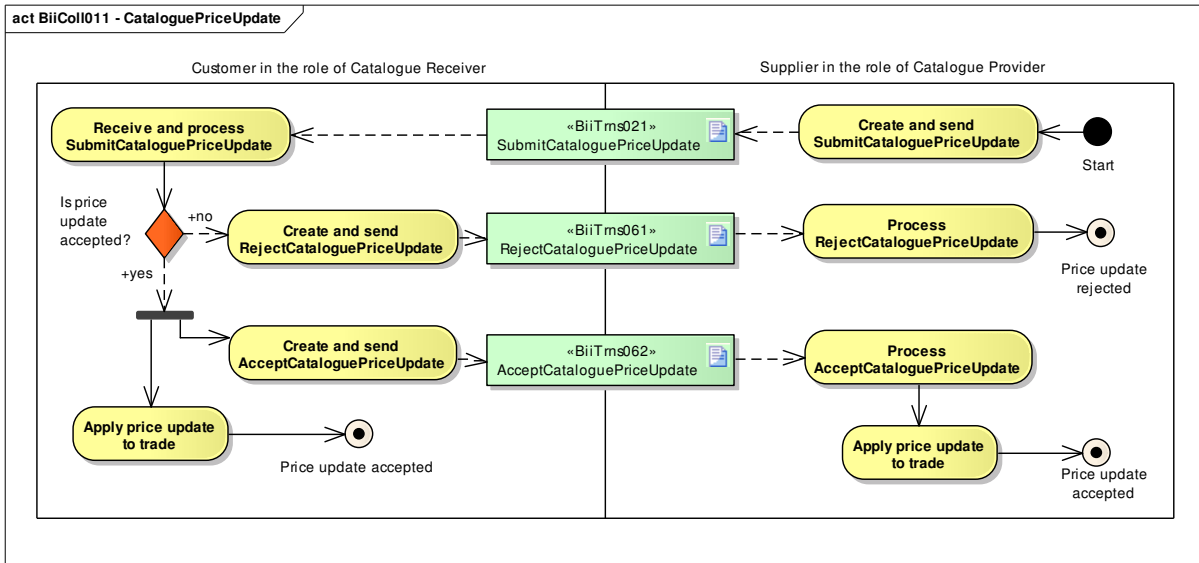
Information constraints relevant to this collaboration are captured in the referenced transaction data model(s).

4.5.2 CataloguePriceUpdate collaboration

4.5.2.1 Overview

Categories	Description and Values
Collaboration ID	BiiColl011
Description	A Supplier, in the role of a Catalogue Provider, sends an update to the prices in an existing catalogue and the Catalogue Receiver either accepts or rejects it.
Pre condition	A catalogue exists with the Catalogue Receiver.
Post condition(s)	<ol style="list-style-type: none"> a. A Catalogue Provider has been notified by a Catalogue Receiver that a catalogue price update has been accepted and applied to trade. b. A Catalogue Provider has been notified by a Catalogue Receiver that a catalogue price update has been rejected and will not be applied to trade.
Transactions	SubmitCataloguePriceUpdate - BiiTrns021 RejectCataloguePriceUpdate - BiiTrns061 AcceptCataloguePriceUpdate - BiiTrns062
Roles	Catalogue provider Catalogue receiver

4.5.2.2 Diagram



4.5.2.3 Activity description

Role	Activity	Description
Main flow	Accept price update	Post condition a
Catalogue Provider	Create and send SubmitCataloguePriceUpdate	Catalogue Provider creates and sends a SubmitCataloguePriceUpdate transaction to Catalogue Receiver.
Catalogue Receiver	Receive and process SubmitCataloguePriceUpdate	Catalogue Receiver receives and processes the SubmitCataloguePriceUpdate transaction.
Catalogue Receiver	Create and send AcceptCataloguePriceUpdate	Catalogue Receiver accepts the catalogue price update and creates and sends an AcceptCataloguePriceUpdate transaction.
Catalogue Receiver	Apply price update	On sending an AcceptCataloguePriceUpdate the Catalogue Receiver applies the SubmitCataloguePriceUpdate (makes it available for trade).
Catalogue Provider	Process AcceptCataloguePriceUpdate	Catalogue Provider receives and processes AcceptCataloguePriceUpdate transaction.
Catalogue Provider	Apply price update	On receipt of an AcceptCataloguePriceUpdate the Catalogue Provider applies the Catalogue or Catalogue update document (makes it available for trade).
Scenario	Price update rejected	Post condition b
Catalogue Receiver	Reject price update. Create and send RejectCataloguePriceUpdate	Catalogue Receiver rejects the catalogue price update and creates and sends RejectCataloguePriceUpdate transaction.
Catalogue Provider	Process RejectCataloguePriceUpdate	Catalogue Provider receives and processes RejectCataloguePriceUpdate transaction.

4.5.2.4 Collaboration business rules

4.5.2.4.1 Process rules

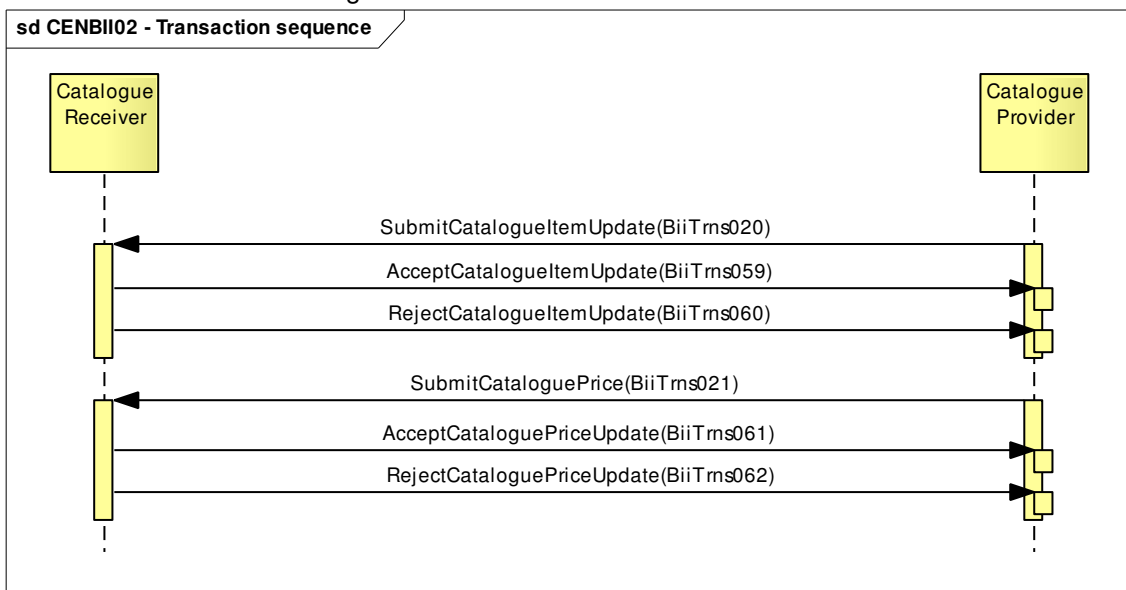
1. By sending a SubmitCataloguePriceUpdate the Supplier is legally committed by its content.
2. Prices expressed in a Catalogue or Catalogue Pricing Update must apply to one specific Customer or to all Customers (a general Catalogue).
3. Prices without a stated validity period are assumed to be valid until cancelled by the Supplier.
4. SubmitCataloguePriceUpdate overwrites all price information in the relevant catalogue line.
5. A SubmitCataloguePriceUpdate transaction may not be used to change the following information in an existing catalogue:
 - o Catalogue ID
 - o Catalogue Name
 - o Catalogue issue date and time
 - o Party information.
6. By sending a SubmitCataloguePriceUpdate transaction the Catalogue Receiver rejects to change items in the referenced catalogue lines and those lines only.
7. By sending a SubmitCataloguePriceUpdate transaction the Catalogue Receiver agrees to change items in the referenced catalogue lines and those lines only.
8. A SubmitCataloguePriceUpdate must make positive reference to an existing catalogue and the catalogue lines that are to be updated.

4.5.2.4.2 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
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Transaction	Trns ID	Data Model	Data model ID, Core - Full
SubmitCatalogueItemUpdate	BiiTrns020	CatalogueItemUpdate	BiiCoreTrdm020 - BiiFullTrdm020
RejectCatalogueItemUpdate	BiiTrns059	CatalogueItemUpdateRejection	BiiCoreTrdm059 - BiiFullTrdm059
AcceptCatalogueItemUpdate	BiiTrns060	CatalogueItemUpdateAcceptance	BiiCoreTrdm060 - BiiFullTrdm060
SubmitCataloguePriceUpdate	BiiTrns021	CataloguePriceUpdate	BiiCoreTrdm021 - BiiFullTrdm021
RejectCataloguePriceUpdate	BiiTrns061	CataloguePriceUpdateRejection	BiiCoreTrdm061 - BiiFullTrdm061
AcceptCataloguePriceUpdate	BiiTrns062	CataloguePriceUpdateAcceptance	BiiCoreTrdm062 - BiiFullTrdm062

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

4.6.2 SubmitCatalogueCatalogueItemUpdate transaction

Categories	Description and Values
Identifier	BiiTrns020
Description	A document to update information about items in an existing catalogue.
Partner Types	Customer Supplier
Authorized Roles	Catalogue provider Catalogue receiver
Legal Implications	None specified.
Initial Event	Create and send SubmitCatalogueItemUpdate.
Terminal event	Receive and process SubmitCatalogueItemUpdate.
Scope	To update item specifications for existing items in a referenced catalogue.
Boundary	Not used for adding or removing items in a catalogue or for updating other catalogue information than item specification.
Business rules	None specified.

4.6.2.1 Transaction business rules

- None specified.

4.6.3 RejectCatalogueItemUpdate transaction

Categories	Description and Values
Identifier	BiiTrns059
Description	A structured electronic business document that contains the negative results of the process of receiving and reviewing a catalogue item update.
Partner Types	Customer Supplier

Categories	Description and Values
Authorized Roles	Catalogue Receiver Catalogue Provider
Legal Implications	None specified.
Initial Event	Prepare and send RejectCatalogueItemUpdate
Terminal event	Receive and process RejectCatalogueItemUpdate.
Scope	To inform a Catalogue Provider that the RejectCatalogueItemUpdate was rejected.
Boundary	None specified.

4.6.3.1 Transaction business rules

- None specified.

4.6.4 AcceptCatalogueItemUpdate transaction

Categories	Description and Values
Identifier	BiiTrns060
Description	A structured electronic business document that contains the positive results of the process of receiving and reviewing a catalogue item update document.
Partner Types	Customer Supplier
Authorized Roles	Catalogue Receiver Catalogue Provider
Legal Implications	None specified.
Initial Event	Prepare and send AcceptCatalogueItemUpdate.
Terminal event	Receive and process AcceptCatalogueItemUpdate.
Scope	To inform a Catalogue Provider that the catalogue item update document was accepted.
Boundary	None specified.

4.6.4.1 Transaction business rules

- None specified.

4.6.5 SubmitCataloguePriceUpdate transaction

Categories	Description and Values
Identifier	BiiTrns021
Description	A structured document to update information about prices in an existing catalogue.
Partner Types	Customer Supplier
Authorized Roles	Catalogue provider Catalogue receiver

Categories	Description and Values
Legal Implications	None specified.
Initial Event	Create and send SubmitCataloguePriceUpdate.
Terminal event	Receive and process SubmitCataloguePriceUpdate.
Scope	To update prices for existing items in a referenced catalogue.
Boundary	Not used for adding or removing items in a catalogue or for updating other catalogue information than prices.
Business rules	None specified.

4.6.5.1 Transaction business rules

- None specified.

4.6.6 RejectCataloguePriceUpdate transaction

Categories	Description and Values
Identifier	BiiTrns051
Description	A structured electronic business document that contains the negative results of the process of receiving and reviewing a catalogue price update.
Partner Types	Customer Supplier
Authorized Roles	Catalogue Receiver Catalogue Provider
Legal Implications	None specified.
Initial Event	Prepare and send RejectCataloguePriceUpdate.
Terminal event	Receive and process RejectCataloguePriceUpdate.
Scope	To inform a Catalogue Provider that the catalogue price update was rejected.
Boundary	None specified.

4.6.6.1 Transaction business rules

- None specified.

4.6.7 AcceptCataloguePriceUpdate transaction

Categories	Description and Values
Identifier	BiiTrns062
Description	A structured electronic business document that contains the positive results of the process of receiving and reviewing a catalogue Price update.
Partner Types	Customer Supplier
Authorized Roles	Catalogue Receiver Catalogue Provider

Categories	Description and Values
Legal Implications	None specified.
Initial Event	Prepare and send AcceptCataloguePriceUpdate.
Terminal event	Receive and process AcceptCataloguePriceUpdate.
Scope	To inform a catalogue provider that the catalogue price update was accepted.
Boundary	None specified.

4.6.7.1 Transaction business rules

- None specified.