



European Committee for Standardization
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CEN/ISSS WS/BII23

Invoice only with dispute

PROFILE DESCRIPTION

Business Domain: Post award procurement

Business Process: Billing

Document Identification: CEN/ISSS WS/Profile BII23

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Document Summary

This profile describes a process comprising the sending of a simple electronic Invoice and the subsequent business response. It is intended for situations where invoicing is electronic but where matching of the Invoice to other electronic documents is not required. The Invoice is a self-contained document with respect to commercial and fiscal requirements.

This profile may cover Invoice factoring and various third party Invoicing handling arrangements.

This profile aims at facilitating the Invoice processing by the backend systems (such as an ERP system) of the Purchasing authority. This profile can also be used with little or no integration with backend systems. However, integration with the accounting (backend) system should enable a higher reduction of management costs. This profile does not cover the Invoice dispute resolution.

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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 implementation of this profile are:

Aspect	Beneficiary	Benefit
Automated Invoice Transfer	Economic operator	Faster Invoice transfers. Potential for shortened payment cycle and improved cash flow.
Automated Invoice Processing	Purchasing authority	Reduced requirement for manual intervention leads to fewer human keying errors. Automatic Invoice validation. Potential for systematic Invoice processing (via the integration with backend systems).
Safer of Processing of Invoices	Economic operator Purchasing authority	Safer processing of the Invoices, so that access to and manipulation of Invoices can be assigned to authorised people (only). Monitoring of the relevant statuses and business events during the Invoice processing.

3.2 Business requirements

1. The Supplier sends an electronic Invoice that can be received and processed by the Customer.
2. The Invoice must comply with the commercial and fiscal requirements of the country where the Supplier is registered.
3. The Invoice content enables the Customer's system to route the document to a specific person, department or unit within the organization; this may be required for authorization etc.
4. The Invoice content facilitates automatic validation of legal and tax values, tax accounting and payment.
5. The electronic Invoice must be complete and accurate to allow processing by the Customer, therefore support for electronic attachments (such as time-sheets) is strongly recommended.
6. Support for factored invoices.

4 Profile detailed description

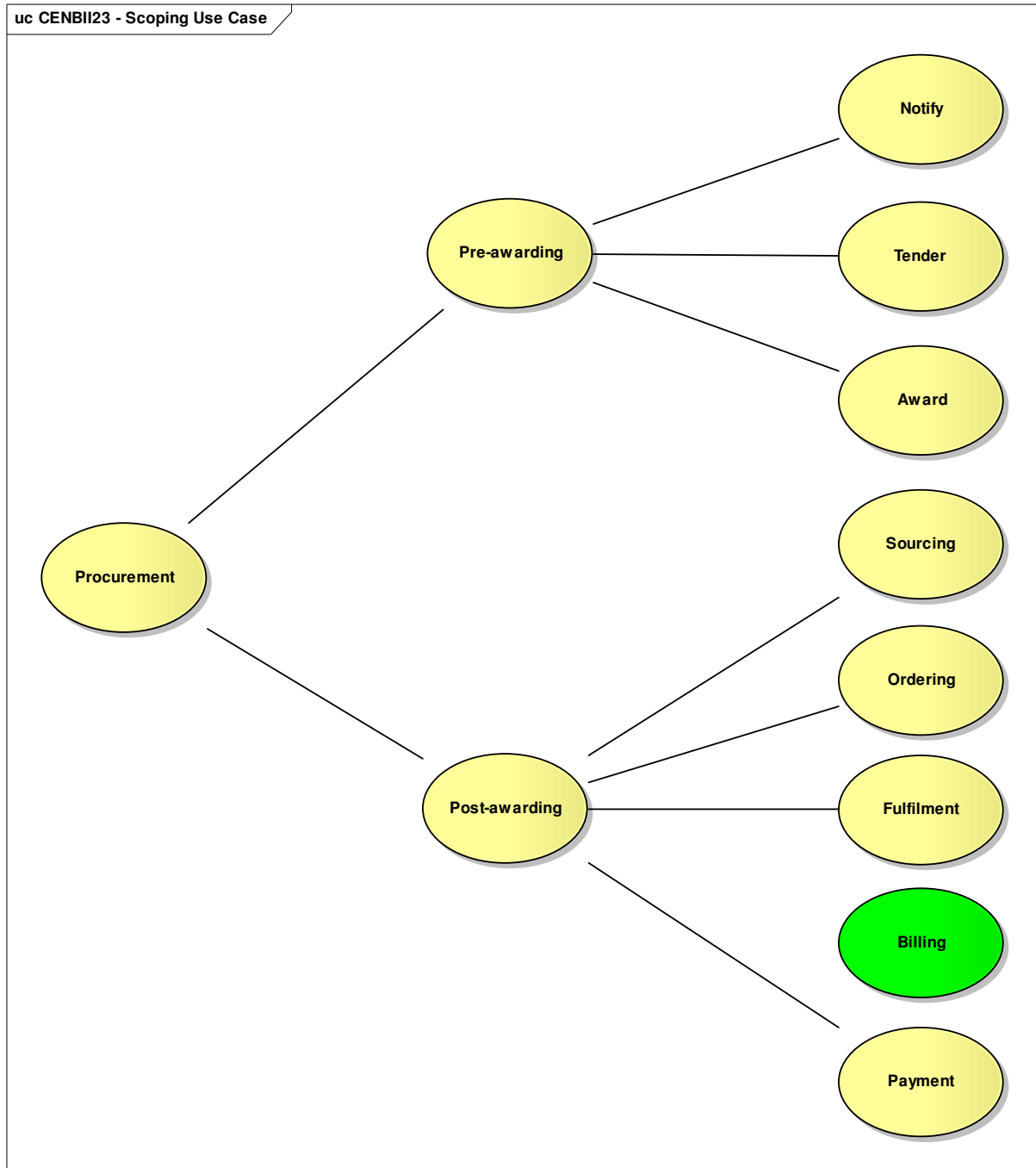
4.1 Context

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

Categories	Description and Values
Business Process	Billing.
Product Classification	All types of goods and services.
Industry Classification	Buyer and Seller organisations in all sectors, public and private.
Geopolitical	Europe.
Official Constraint	Directive 2001/115/EC (Electronic Data Interchange, Advanced Electronic Signatures or Other Means).
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 Invoice only with Dispute profile covers the following business processes highlighted in the above figure.

4.3 Partners and authorized roles

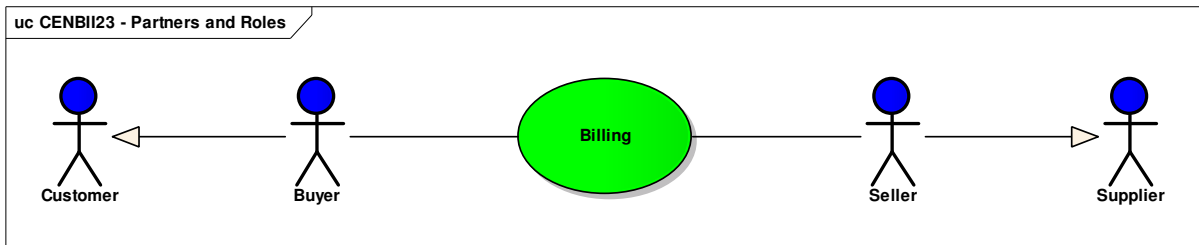
The following business partners participate in this profile, acting in the roles as defined below.

Business partner	Description
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.
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Party	Role/actor	Description
Supplier	Creditor	One to whom a debt is owe. The Party that claims the payment and is responsible for resolving billing issues and arranging settlement. The Party that sends the Invoice. Also known as Invoice Issuer, Accounts Receivable, Seller.
Customer	Debtor	One who owes debt. The Party responsible for making settlement relating to a purchase. The Party that receives the Invoice. Also known as Invoicee, Accounts Payable, Buyer.

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

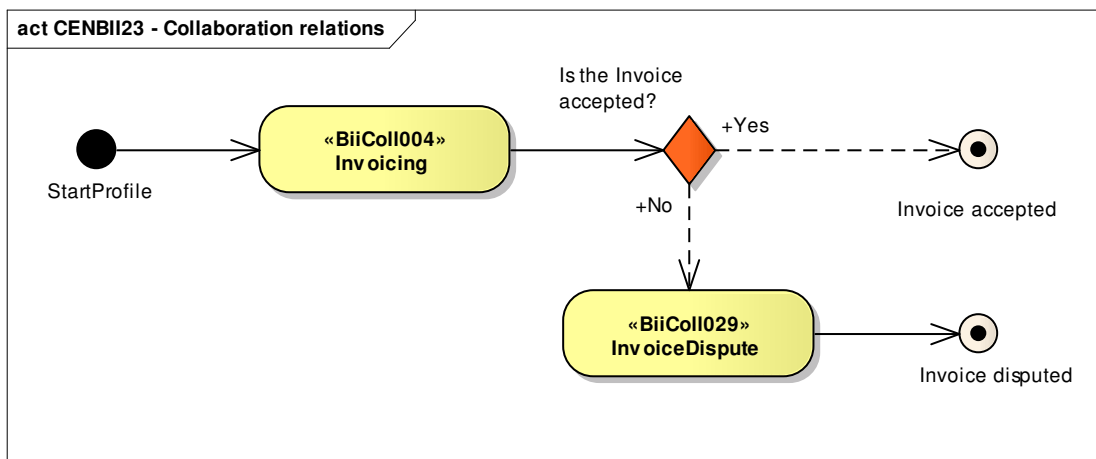


4.4 Choreography of business collaborations

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

Business Process	Business Collaboration(s)	Collaboration ID
Invoicing	Invoicing	BiiColl004
	InvoiceDispute	BiiColl029

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	A Creditor sends an electronic Invoice to a Debtor. After receiving and processing the Invoice the Debtor sends a business level response that either states that the Invoice is accepted for payment or that it is in some way disputed. In case of Invoice rejection or Invoice dispute the resolution of the technical or business issue is external to the profile.
Pre-conditions	The Debtor and the Creditor have identified each other and a contract between the two or an Order exists. The Debtor has agreed to accept electronic Invoices that use this profile.
Post-conditions	The Invoice is: <ol style="list-style-type: none"> 1. Ready to be paid 2. Disputed
Remarks	None.

4.4.1 Profile business rules

4.4.1.1 Process rules

1. If documents make references to contracts such as framework agreements those contracts supersede the document content.

4.4.1.2 Information constraints

- None identified.

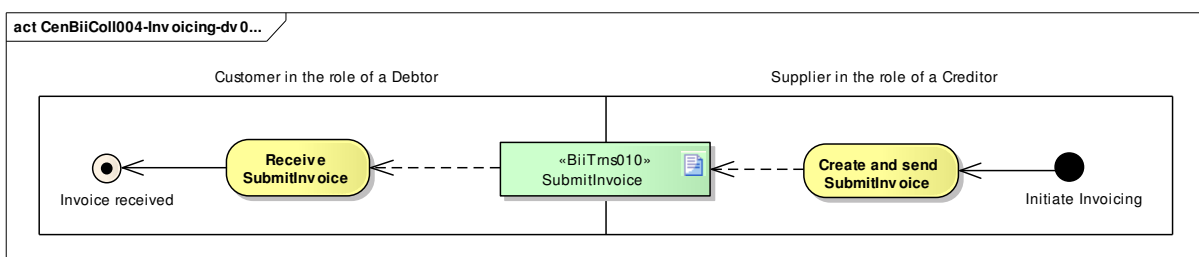
4.5 Business Collaboration(s) detailed description

4.5.1 Invoicing collaboration

4.5.1.1 Overview

Categories	Description and Values
Collaboration ID	BiiColl004
Description	The collaboration is used to deliver an Invoice from a Creditor to a Debtor. It does not require the Debtor to produce any business level response.
Pre condition	None.
Post condition(s)	The Debtor has received an Invoice
Transactions	SubmitInvoice - BiiTrns010
Roles	Creditor Debtor

4.5.1.2 Diagram



4.5.1.3 Activity description

Role	Activity	Description
Creditor	Create and send SubmitInvoice	The Creditor creates and sends an Invoice to the Debtor.
Debtor	Receive SubmitInvoice	The Debtor receives the Invoice.

4.5.1.4 Collaboration business rules

4.5.1.4.1 Process rules

1. The invoice must comply with the commercial and fiscal requirements of the country where the Supplier is registered.
2. An electronic Invoice represents a legal claim for payment.
3. Payment means and terms stated at document level must apply to all invoice lines.
4. Accounting details stated at document level must apply to all invoice lines.
5. Tax information stated at document level must apply to all invoice lines.
6. Stated pre-payments must apply to the invoice as a whole.

4.5.1.4.2 Information constraints

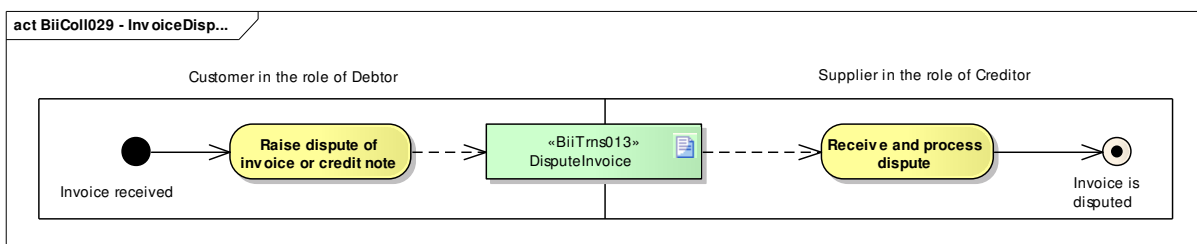
Information constraints relevant to this collaboration are captured in the referenced transaction data model(s).

4.5.2 InvoiceDispute collaboration

4.5.2.1 Overview

Categories	Description and Values
Collaboration name	InvoiceDispute
Collaboration ID	CenBiiColl029
Description	Following the reception of an Invoice the Debtor may electronically raise a dispute. Note: this profile does not preclude the Creditor from noticing an error and taking corrective action independently.
Pre condition	The Customer, in the role of a Debtor, has received an Invoice from the Supplier who is in the role of a Creditor.
Post condition(s)	The Invoice concerned has been disputed.
Transactions	DisputeInvoice - BiiTrns013
Roles	Creditor Debtor

4.5.2.2 Diagram



4.5.2.3 Activity description

Role	Activity	Description
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Main flow		
Debtor	Raise dispute of invoice	In disputing the Invoice, the Debtor sends a DisputeInvoice transaction to the Creditor with details of the dispute.
Creditor	Receive and process dispute	Debtor receives the DisputeInvoice transaction from the Creditor and processes it.

4.5.2.4 Collaboration business rules

4.5.2.4.1 Process rules

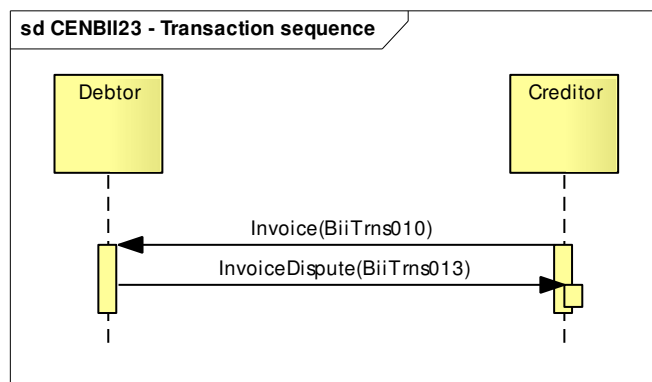
- By sending a DisputeInvoice with reference to an Invoice or a Credit Note the Debtor raises an objection and requests corrections.
- The DisputeInvoice does not alleviate the claim for payment made with the Invoice or Credit Note.
- The DisputeInvoice only applies to the parts of the Invoice/Credit note that are referenced in the DisputeInvoice transaction, i.e. if one line in an Invoice is disputed the Debtor is still obliged to pay other lines according to agreed terms.
- Document level information in DisputeInvoice applies to the referenced document in full.
- Dispute must contain following information:
 - Nature of objection on document level.
 - Description of objection.
 - Invoice or Credit Note Line ID
 - Nature of objection on line level.

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
SubmitInvoice	BiiTrms010	Invoice	BiiCoreTrdm010 - BiiFullTrdm010
DisputeInvoice	BiiTrms013	InvoiceDispute	BiiCoreTrdm013 - BiiFullTrdm013

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

4.6.2 SubmitInvoice transaction

Categories	Description and Values
Identifier	BiiTrns010
Description	A structured electronic business document claiming payment for goods or services supplied under conditions agreed between the Supplier and the Customer. In most cases this document describes the actual financial commitment of goods or services ordered from the Supplier.
Partner Types	Customer Supplier
Authorized Roles	Creditor Debtor
Legal Implications	See business rules below.
Initial Event	Create and send invoice.
Terminal event	Receive Invoice.
Scope	Invoicing for any goods and services.
Boundary	None
Constraints	See business rules below

4.6.2.1 Transaction business rules

1. An invoice containing VAT information must comply with VAT rules of the country where supplier is registered. If supplier and buyer are registered within the same country, the invoice must comply with the commercial and fiscal requirements of that country.

4.6.3 DistputeInvoice transaction

Categories	Description and Values
Identifier	BiiTrns013
Description	A structured electronic business document providing a business level response to an invoice or a credit note.
Partner Types	Customer Supplier
Authorized Roles	Debtor Creditor
Legal Implications	None specified.
Initial Event	Raise dispute of invoice or credit note.
Terminal event	Receive and process dispute.
Scope	To inform Creditor that the Debtor objects to an invoice or credit note in part or in full.
Boundary	Objections to invoices and credit notes. Not used for positive replies.
Constraints	None specified.

4.6.3.1 Transaction business rules

- None specified.

