

STN P	Elektronické verejné obstarávanie Architektúra Časť 1: Prehľad referenčnej architektúry	STN P CEN/TS 17011-1 36 9639
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Electronic Public Procurement - Architecture - Part 1: Reference Architecture Overview

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/26

Táto predbežná slovenská technická norma je určená na overenie. Prípadné pripomienky pošlite do októbra 2027 Úradu pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky.

Obsahuje: CEN/TS 17011-1:2025

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English Version

**Electronic Public Procurement - Architecture - Part 1:
Reference Architecture Overview**

Marchés publics électroniques - Architecture - Partie 1
: Aperçu de l'architecture de référence

Elektronische öffentliche Auftragsvergabe -
Architektur - Teil 1: Überblick über die
Referenzarchitektur

This Technical Specification (CEN/TS) was approved by CEN on 15 September 2025 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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CEN/TS 17011-1:2025 (E)

Contents		Page
European foreword.....		4
Introduction		5
1	Scope	9
2	Normative references	9
3	Terms and definitions	9
4	Symbols and abbreviated terms	10
5	eProcurement set of interoperability specifications	10
5.1	General.....	10
5.2	Positioning in EIRA.....	11
6	BII Choreography specification.....	12
6.1	General.....	12
6.2	Positioning in EIRA	13
6.3	Specification template.....	14
7	BII transaction Specification	19
7.1	General.....	19
7.2	Positioning in EIRA.....	19
7.3	Specification template.....	20
8	BII syntax binding	24
9	Extension to EIRA	25
9.1	Business services	25
9.2	eProcurement data model	25
10	Semantic Data types	25
10.1	General.....	25
10.2	Amount. Type.....	26
10.3	Unit Price Amount. Type.....	26
10.4	Quantity. Type	26
10.5	Percentage. Type	27
10.6	Identifier. Type	27
10.7	Document Reference. Type.....	27
10.8	Code. Type.....	28
10.9	Date. Type	28
10.10	Time. Type	28
10.11	Text. Type.....	29
10.12	Binary Object. Type	29
10.13	Boolean. Type	29
11	eProcurement ontology	30
11.1	General.....	30
11.1.1	General.....	30
11.1.2	CEN WS/BII business terms.....	30
11.1.3	eProcurement Ontology business terms	30
11.2	Bridging the discrepancy between CEN/WS BII3 business terms and ePO	31
11.2.1	General.....	31

11.2.2 Approach	31
11.2.3 Step A: List business terms	31
11.2.4 Step B: Map to eProcurement Ontology concepts	32
11.2.5 Step C: Resolve gaps	32
11.2.6 Defining the transactions	33
11.2.7 Documenting the transaction definition	33
11.2.8 Example	34
12 How to claim conformance	41
13 Derivative use	41
Annex A (informative) Guideline on the use of BPMN for Business reference Model	42
A.1 General	42
A.2 BPMN objects used and their explanation	44
A.3 Events	45
A.4 Flow/Connecting objects	46
A.5 Rules for Sending and Receiving Messages	46
A.6 Artefacts	47
A.7 Examples	48
Annex B (informative) Shift from CEN BII architecture to EIRA v2.0 aligned deliverables	50
Bibliography	52

CEN/TS 17011-1:2025 (E)**European foreword**

This document (CEN/TS 17011-1:2025) has been prepared by Technical Committee CEN/TC 440 “Electronic Public Procurement”, the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document is part of a series of multi-part documents prepared, or under preparation, by CEN/TC 440:

- 17011-series: **eProcurement Architecture**, providing a set of specifications outlining different aspects of the eProcurement architecture for Business Interoperability Specifications.
- 17014-series: **eTendering Business Interoperability Specifications**, providing a set of specifications outlining business choreography, transaction, syntax binding specifications and guidelines required to support the eTendering processes.
- 17015-series: **eCatalogue Business Interoperability Specifications**, providing a set of specifications outlining business choreography, transaction, syntax binding specifications and guidelines required to support the eCatalogue processes.
- 17016-series: **eOrdering Business Interoperability Specifications**, providing a set of specifications outlining business choreography, transaction, syntax binding specifications and guidelines required to support the eOrdering processes.
- 17017-series: **eFulfilment Business Interoperability Specifications**, providing a set of specifications outlining business choreography, transaction, syntax binding specifications and guidelines required to support the eDelivery processes.

The terms “shall”, “shall not”, “should”, “should not”, “may”, “need not” “can” and “cannot” are interpreted according to Annex H of the CEN-CENELEC Internal Regulations, Part 3¹.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

¹ <https://boss.cen.eu/reference-material/refdocs/pages/>

Introduction

The objective of the work in CEN/TC 440, Electronic public procurement, is to provide standards, in the form of Business Interoperability Interface specifications, as a tool to ensure interoperability and thus facilitate efficient and effective electronic information exchange in the (public) eProcurement processes between the buyer and the seller.

This is to facilitate end-to-end eProcurement² including both pre-award and post-award processes (see Figure 1).

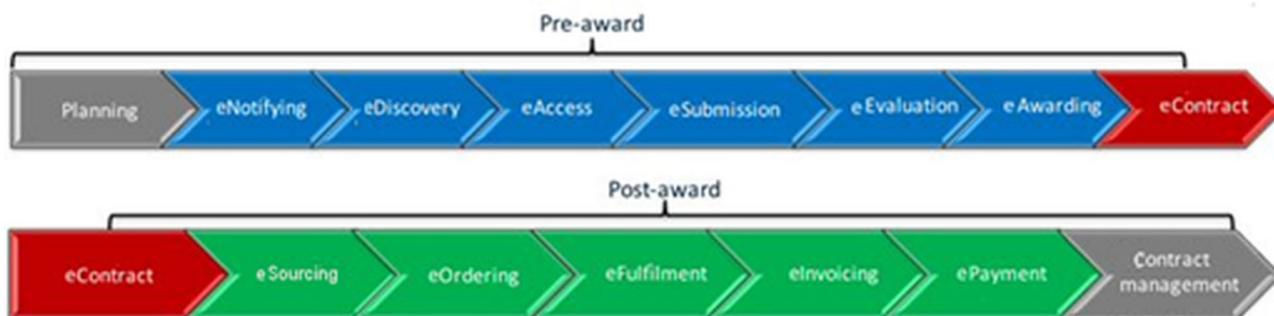


Figure 1 — The pre-and post-award processes of public eProcurement

eProcurement refers to the use of electronic communications and transaction processing by public sector organizations and economic operators when buying/providing supplies and services or tendering works, see Tables 1 and 2.

Table 1 — Business areas in the pre-award phase of public eProcurement

	Business Areas		Example information exchange ^a
	Planning	Planning of milestones and electronic tracking of the achievements. Planning is an internal business process and is not covered by BII specifications.	
Pre-award (eTendering)	eNotifying	Notification includes information exchange, publication and dissemination of notices related to procurement opportunities such as Prior Information Notices, Contract Notices and Contract Award Notices. eNotifying is specified by the Publication Office of the European Commission and therefore out of scope for TC 440.	<ul style="list-style-type: none"> — Prior Information Notice — Contract Notice — Contract Award Notice
	eDiscovery	Search for interesting business opportunities on a publication portal. eDiscovery is a service of the Publication Office of the European Commission and therefore out of scope for TC 440.	<ul style="list-style-type: none"> — Search notice query transaction — Notice metadata transaction

² The concept of end-to-end procurement is further elaborated in COM(2013) 453 final on end-to-end eProcurement to modernize public administration [6].

CEN/TS 17011-1:2025 (E)

	Business Areas		Example information exchange ^a
	eAccess	Procurement procedure subscription and access includes electronic access to tender documents and specifications, including electronic access to supporting documents for sellers in the preparation of a Tender response, e.g. clarifications, questions and answers. This includes expressing interest in a business opportunity to be listed in the procurement procedure.	<ul style="list-style-type: none"> — Express Interest in Call for Tenders — Call for tender — European Single Procurement Document (ESPD) (Out of scope for TC 440) — Invitation to Tender — Pre-award Catalogue Request — Call for Tender Question and answers
	eQualification	identification and verification of the capabilities of any economic operator that wants to present an offer in a particular tendering procedure.	<ul style="list-style-type: none"> — Qualification
	eSubmission	Secure submission of tenders and/or catalogues in electronic format to the contracting body (contracting authority/ contracting entity), which can receive and process it in compliance with applicable legal requirements.	<ul style="list-style-type: none"> — Tender — Tender Withdrawal — Virtual Company Dossier — European Single Procurement Document (ESPD) — Pre-award Catalogue
	eEvaluation	Evaluation of the electronic tenders and/or catalogues received by the contracting body following the closing deadline of a tender competition, including electronic exchange to enable the clarification of tender content by evaluations. eEvaluation is an internal business process and therefore out of scope for TC 440.	<ul style="list-style-type: none"> — Clarification questions and answers
	eAwarding	Information exchange regarding award of the contract, including electronic exchange to support tenderers requesting additional information about the result of the procedure.	<ul style="list-style-type: none"> — Awarding notification — Additional information
	eSourcing	Information exchange regarding the catalogue to be used for ordering.	<ul style="list-style-type: none"> — Pre-award catalogue request — Pre-award catalogue
	eContract	Signing, enactment of a contract / agreement and possibly its related catalogue through electronic means between the contracting bodies and the winning tenderer(s), as well as the signing of contract amendments and possibly their related catalogue.	<ul style="list-style-type: none"> — Draft Contract — Signed Contract — Catalogue Request — Catalogue
It should be noted that the business transactions listed are examples only and do not constitute the full list of relevant business transactions.			

Table 2 — Business areas in the post-award phase of public eProcurement

	Business Areas		Example information exchange
Post-award	eSourcing	Activities preparatory to issuing an order, including the exchange of electronic messages with winning tenderers who have signed a framework agreement with the contracting body, a request for quotation and the response to the quotation (e.g. framework agreements with reopening competition), etc. Exchange of catalogue information and punch-out ordering from a catalogue	— Request for Quotation — Quotation — Catalogue request — Catalogue — Catalogue response — Punch-out — Shopping cart
	eOrdering	Issuing of an electronic order by the contracting body and its acceptance by the seller or conversely issuing of an electronic order agreement by the seller.	— Order — Order Response — Order cancellation — Order agreement
	eFulfilment	Electronic exchange of information that enable monitoring the execution of the order or the contract.	— Despatch Advice — Receiving Advice
	eInvoicing	Issuing, sending, receiving and processing invoices and billing data. eInvoicing is covered by TC434 and therefore out of scope for TC 440.	— Invoice — Credit Note
	ePayment	Financial payment involving currency transfer between a contracting body and a seller. ePayment is covered by ISO/TC68 and therefore out of scope for TC 440.	
	Contract management	Management of relationships with sellers and contracts, including archiving. Contract management is an internal business process and therefore out of scope for TC 440.	

The aim of CEN/TC 440 is to provide a focused and coordinated approach to development of appropriate European Standards that:

- build upon and complement existing initiatives, such as CEN WS/BII3 (see Annex B) and CEN/TC 434, and be part of a wider eBusiness standardization portfolio;
- facilitate end-to-end eProcurement and thus support European policy objectives expressed in e.g. “Digital Agenda for Europe” [3] and “A strategy for eProcurement (COM(2012) 179 final)” [4], “End-to-end eProcurement to modernise public administration (COM(2013) 453 final)” [5], the “public procurement directive” [6];
- recognize the rather ambitious timeline envisaged for implementation of the new procurement directives, stressing the importance of available standards as a basis for compliant software solutions to be available in the market;
- allow for user engagement and participation as well as effective production of the standards required by being focused on public procurement needs (but take generic applicability for ‘Business-to-Business’ into account as and when relevant);

CEN/TS 17011-1:2025 (E)

- facilitate improved efficiency and cost reduction in both public and private sector entities;
- focus on cross-border and cross-platform interoperability to allow economic operators to select the platform of their choice and still can participate in procurement opportunities across the full European market.

The deliverables from CEN/TC 440 collectively provide a framework for interoperability in pan-European electronic transactions for eProcurement expressed as a set of technical specifications that is expected to:

- allow for efficient and effective implementation of electronic exchange of documents in public eProcurement as well as in transactions between enterprises;
- support implementation of end-to-end eProcurement including both pre-award and post-award processes for public procurement;
- facilitate interoperability between independent solutions;
- provide an added value to stakeholders, such as solution and service providers, as well as contracting bodies and economic operators involved in the eProcurement process.

The work in CEN/TC 440 focuses on interoperability aspects of the exchange of information between business partners. Back-office information processing, e.g. the internal processing and business evaluation of the actual information content, is out of scope. To ensure interoperability, the information exchange will be described in the form of:

- choreography specifications, describing the flow of the business process and the sequence of information exchange;
- business transaction information models, describing the information content of each information exchange;
- syntax binding specifications, describing how the information content of a business transaction information model is represented in a specific syntax;
- guidelines, providing additional guidance on specific topics.

For a full description of different document types, see Clause 6 of this document.

It should be noted that CEN/TC 440 deliverables do not provide the full legal framework enabling business partners to fulfil their legal obligations. It is the responsibility of the business partners themselves to ensure that the business documents exchanged respect any rules specified by relevant legislation, including requirements related to personal data protection, as well as rules stated as part of a trading relationship between them.

Use of ePO ontology

This document uses the ePO ontology, owned by the European Union, available here (<https://github.com/OP-TED/ePO>) and licensed under a CC BY 4.0 licence.

1 Scope

The purpose of this deliverable is to specify and describe the reference architecture applied as the basis for the development of Business Interoperability Interface specifications in the eProcurement domain by the CEN/TC 440 Technical Committee.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 8601-1:2019, *Date and time — Representations for information interchange — Part 1: Basic rules*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN