BS EN 17015-1:2024

BSI Standards Publication

Electronic Public Procurement — Catalogue

Part 1: Choreographies

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Contents

Page

European foreword 4
Introduction 5
1 Scope 6
2 Normative references 6
3 Terms and definitions 6
4 Symbols and abbreviated terms 9
5 Business Environment and high-level business requirements 9
5.1 Choreographies (business) Goals 9
5.2 Business environment 10
5.2.1 General 10
5.2.2 Business context 10
5.2.3 Positioning in EIRA 11
5.3 Organization and Business Partners involved 11
5.4 High-level business process requirements 12
6 Choreography Catalogue 13
6.1 General 13
6.2 Business processes variants 13
6.2.1 General 13
6.2.2 High-level business process variants requirements 14
6.2.3 Claiming compliance 15
6.3 Business process variant A – Catalogue With Response 15
6.3.1 Business process variant A requirements 15
6.3.2 Business process variant A state machine diagram [informative] 15
6.3.3 Business process variant A definition 15
6.3.4 Business process variant A scenarios 17
6.3.5 Business process variant A business rules 18
6.3.6 Business process variant A key examples [informative] 18
6.4 Business process variant B – Catalogue Without Response 19
6.4.1 Business process variant B requirements 19
6.4.2 Business process variant B state machine diagram [informative] 19
6.4.3 Business process variant B definition 19
6.4.4 Business process variant B scenarios 20
6.4.5 Business process variant B business rules 21
6.4.6 Business process variant B key examples [informative] 21
7 Choreography Pre-award catalogue 22
7.1 General 22
7.2 Business processes variants 22
7.2.1 General 22
7.2.2 High-level business process variants requirements 23
7.2.3 Claiming compliance 23
7.3 Business variant C – Simple Pre-award Catalogue 23
7.3.1 Business process variant C requirements 23
7.3.2 Business process variant C state machine diagram [informative] 23

Documents
Document Sharing Hub
Full document details: BS EN 17015-1:2024

7.3.3 Business process variant C definition ... 24
7.3.4 Business process variant C scenarios ... 25
7.3.5 Business process variant C business rules ... 25
7.3.6 Business process variant C key examples [informative] - Example 1 ... 25
7.4 Business process variant D – Advanced Pre-award Catalogue ... 25
7.4.1 Business process variant D requirements ... 25
7.4.2 Business process variant D state machine diagram [informative] ... 26
7.4.3 Business process variant D definition ... 26
7.4.4 Business process variant D scenarios ... 27
7.4.5 Business process variant D business rules ... 28
7.4.6 Business process variant D key examples [informative] - Example 1 ... 28

8 Choreography External Catalogue ... 29
8.1 General ... 29
8.2 Business process variants ... 29
8.2.1 General ... 29
8.2.2 High-level business process variants requirements ... 29
8.2.3 Claiming compliance ... 29
8.3 Business process variant E – Punch-out ... 30
8.3.1 Business process variant E requirements ... 30
8.3.2 Business process variant E state machine diagram [informative] ... 30
8.3.3 Business process variant E definition ... 30
8.3.4 Business process variant E scenarios ... 31
8.3.5 Business process variant E rules ... 32
8.3.6 Business process variant E key examples [informative] - Example 1 ... 32

9 Transactions involved ... 32
9.1 Summary ... 32
9.2 Collaborations ... 33
9.2.1 General ... 33
9.2.2 Catalogue Provider sends Catalogue (BC-17015-1:2024-1) ... 33
9.2.3 Catalogue Receiver sends Catalogue Response (BC-17015-1:2024-2) ... 34
9.2.4 Catalogue Receiver sends Pre-award Catalogue Request (BC-17015-1:2024-3) ... 35
9.2.5 Catalogue Provider sends Pre-award Catalogue (BC-17015-1:2024-4) ... 36
9.2.6 Seller sends Shopping-cart (BC-17015-1:2024-5) ... 37

Annex A (informative) Overview of the clauses and subclauses which fall under derivative use ... 38

Bibliography ... 39

Documents
Document Sharing Hub
Full document details: BS EN 17015-1:2024

European foreword

This document (EN 17015-1:2024) has been prepared by Technical Committee CEN/TC 440 "Electronic Public Procurement", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2024, and conflicting national standards shall be withdrawn at the latest by October 2024.

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- 17011-series: eProcurement Architecture, providing a set of specifications outlining different aspects of the eProcurement architecture for Business Interoperability Specifications.
- 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 eFulfilment processes.

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[1] https://boss.cen.eu/reference-material/refdocs/pages/

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Introduction

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Intended use of this publication

This document has been developed for any organization looking for guidance on the implementation and use of electronic procurement deliverables as well as for organizations developing or implementing software applications related to electronic procurement, such as software providers, business entities and national authorities. These software applications should be in conformance with this publication.

Parts of the document to which derivative use apply

Each subclause, which falls under derivative use, will be clearly marked with a footnote. The degree to which the specific content can be modified is specified in CEN/TS 17011-3[2], *Electronic Public Procurement — Architecture — Part 3: Customization Guideline*.

Annex A provides an overview of the line number references to all subclauses of the publication which fall under derivative use.

[2] Under preparation.

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1 Scope

The purpose of this deliverable is to specify and describe choreographies for exchanging an electronic product catalogue ("catalogues") as part of the business processes in the pre-award and post-award area, so that catalogues can serve as a basis for placing orders as well as evaluating tenders. The key aspects covered by this choreography specification are:

— processes for submitting catalogues from the selling to the buying side;

— processes for submitting catalogue-related data as part of a tendering process;

— processes integrating sell-side procurement systems.

This document does not apply to the transactions used in the specified choreographies. These transactions are specified in EN 17015-2. The relationship between the choreographies and the transaction is described in Clause 8.

The identifier of this choreographies document is EN 17015-1:2024.

How to claim compliance to this choreography is specified in 6.2.3.

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.

EN 17015-2:—[3], *Electronic Public Procurement — Catalogue — Part 2: Transactions*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org

3.1
agent
person, organization, or system that acts in procurement or has the power to act in procurement

[SOURCE: eProcurement Ontology, v3.1.0, 2022-12-17]

3.2
business process
sequence or network of activities and collaborations between two or more *agents* (3.1)

[3] Under preparation. Stage at the time of publication: prEN 17015-2:2024.

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3.3
business process variant
specification of a *business process* (3.2) belonging to a *choreography* (3.9)

Note 1 to entry: Different variants may support different electronic information exchange or collaborations. Agents may publicly advertise their capability to support one or more variants in an automated fashion.

3.4
buyer
role (3.14) of an *agent* (3.1) that awards a contract and/or purchases items

Note 1 to entry: In pre-award, the buyer generally awards the contract, however future purchasers may be foreseen. In post-award the buyer generally refers to the purchaser of items.

[SOURCE: eProcurement Ontology, v3.1.0, 2022-12-17, modified — Note 1 to entry has been added]

3.5
catalogue
document describing a set of *items* (3.11) offered for purchase that can be processed in an electronic way

Note 1 to entry: The terms "eCatalogue" and "Post-award Catalogue" are synonyms for this term.

[SOURCE: eProcurement Ontology, v3.1.0, 2022-12-17, modified — Note 1 to entry has been added]

3.6
catalogue provider
role (3.14) of an *agent* (3.1) compiling and supplying a *catalogue* (3.5)

Note 1 to entry: The catalogue provider role is usually played by the agent that acts as a seller, or by another agent that acts on behalf of the seller.

[SOURCE: eProcurement Ontology, v3.1.0, 2022-12-17, modified — Note 1 to entry has been added]

3.7
catalogue receiver
role (3.14) of an *agent* (3.1) processing a *catalogue* (3.5)

Note 1 to entry: The catalogue receiver may not only receive it but also validate it, process it, etc. The catalogue receiver role is usually played by the agent that acts as a buyer, or by another agent that acts on behalf of the buyer.

[SOURCE: eProcurement Ontology, v3.1.0, 2022-12-17, modified Note 1 to entry has been added]

3.8
catalogue response
single message from the *catalogue receiver* (3.7) to the *catalogue provider* (3.6) on the acceptance of the related catalogue (3.5) sent by the catalogue provider (3.6)

[SOURCE: eProcurement Ontology, v3.1.0, 2022-12-17]

3.9
choreography
set of *business processes* (3.2) having the same goals

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3.10
collaboration
interaction between two or more *agents* (3.1) that result in the exchange of data between the *agents* (3.1) involved as part of a *business process* (3.2)

3.11
item
product, work, service or any combination of them

Note 1 to entry: An item can be an atomic thing or a composition of things that together are seen as a unit, e.g. a tetrabrik of milk or an indivisible package of six tetrabriks.

[SOURCE: eProcurement Ontology, v3.1.0, 2022-12-17, modified — Note 1 to entry has been added]

3.12
pre-award catalogue
catalogue (3.5) that is submitted as a tender in response to a call for tenders

3.13
pre-award catalogue request
document describing the requirements on *items* (3.11) to be tendered and on the *catalogue* (3.5) that should be submitted as a tender

3.14
role
relative concept that ties an *agent* (3.1) to a part they play in a given situational context.

Note 1 to entry: Originally named *agent in role* in the eProcurement Ontology.

[SOURCE: eProcurement Ontology, v3.1.0, 2022-12-17, modified — Note 1 to entry has been added]

3.15
seller
role (3.14) of an *agent* (3.1) who transfers the ownership of the procurement results (goods, services or work) to the *buyer* (3.4)

[SOURCE: eProcurement Ontology, v3.1.0, 2022-12-17]

3.16
state
set of options and obligations of the participating *agents* (3.1) at a defined step in a *business process* (3.2) to perform specific activities and *collaborations* (3.10)

Note 1 to entry: An activity of an agent or a collaboration may cause the transition of one state to another in a specified set of next steps.

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3.17
transaction
content of data exchanged or shared between the *agents* (3.1) in a *collaboration* (3.10)

Note 1 to entry: A transaction is the atomic unit that leads to a synchronized state in the information systems of collaborating agents. It is the basic building block to specify the choreography between agents. When an agent recognizes an event that changes the state of a business object within a business process, it uses a transaction to synchronize with the collaborating agent. A transaction therefore changes the state of a business process. It carries the intention of the initiating agent and is represented by a data structure that is required by a data model. The exchange of a transaction may alter legal obligations between business partners.

4 Symbols and abbreviated terms

ABB	Architectural Building Block
EIF	European Interoperability Framework
EIRA	European Interoperability Reference Architecture
HLR	High-Level Requirement
IoP	Interoperability
MRO	Maintenance, Repair and Operations
SME	Small and Medium-sized Enterprise

5 Business Environment and high-level business requirements

5.1 Choreographies (business) Goals

The business goals supported by implementing these choreographies are described in Table 1:

Table 1 — Business goals

ID	Description
G-17015-1:2024-1	Facilitate the comparison of items on the buying side.
G-17015-1:2024-2	Simple storage and automated maintenance of item information on the buying side.
G-17015-1:2024-3	Correct identification and pricing of items in the ordering processes and tendering processes.
G-17015-1:2024-4	Enable Sellers to provide tailored item and price information.

The main business benefits to be gained by implementing these choreographies are described in Table 2:

Table 2 — Main business benefits

ID	Description
B-17015-1:2024-1	Enables the optimization and automation of the order process the order can be based on the sellers/providers own item information, in particular the item identification.
B-17015-1:2024-2	Facilitates preparing of orders.

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5.2 Business environment

5.2.1 General

The intended scope for these choreographies includes public procurement, but the choreography may also be used in Business to Business (B2B) relations.

The choreographies is intended to support transmission of electronic documents for processing in (semi) automated processes. The legal requirements that were taken into account are requirements from European legislation, particularly the EU directives, as mentioned in the bibliography section of this document.

The list of the transactions involved in this choreography is specified in Clause 8.

5.2.2 Business context

The choreographies specified in this document belong to the pre- and post-award area as shown in Figure 1:

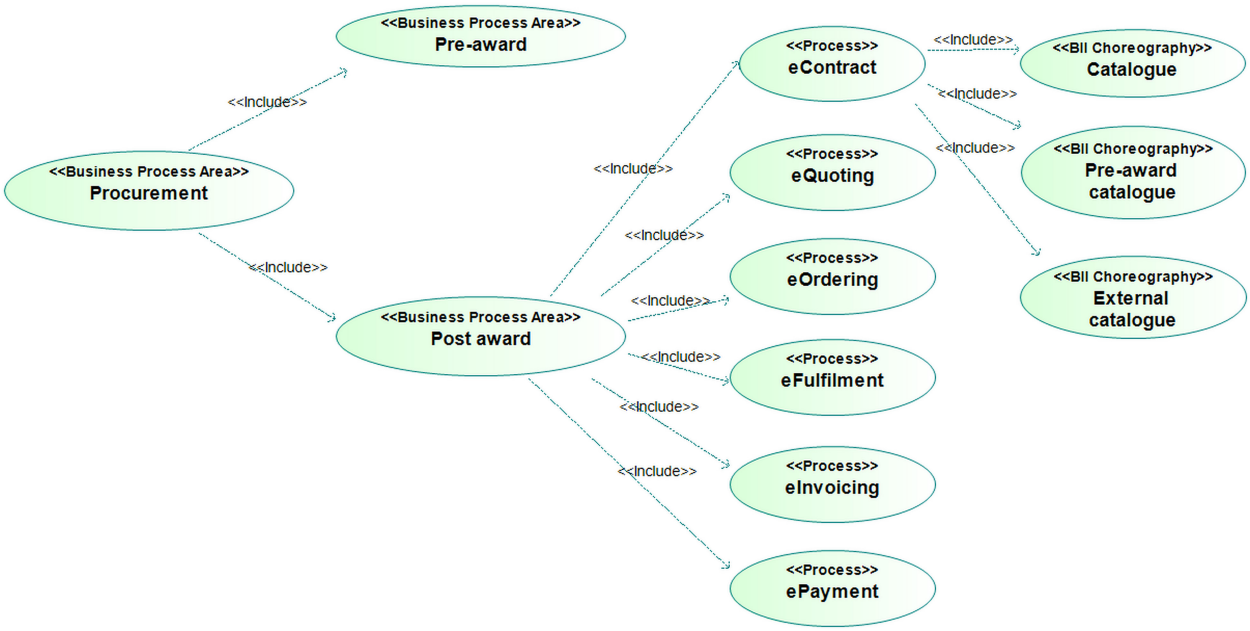

Figure 1 — Position of the catalogue choreographies in the procurement process

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5.2.3 Positioning in EIRA

Table 3 — Position in EIRA

EIRA ID	Title	Domain	Interface	Scope	Modality
EN 17015-1:2024	*Electronic Public Procurement – Catalogue – Choreographies*	Procurement	Machine/ Customer Machine/ Supplier	• eProcurement extension of ABB176 Organisational Interoperability Specification • eProcurement extension of ABB12 Business Capability, • eProcurement extension of ABB170 Exchange of Business Information • eProcurement extension of ABB16 Business Rule	Endorsing

5.3 Organization and Business Partners involved

The following key roles participate in this Choreography, acting in the roles as specified in Table 4 and Figure 2 below.

Table 4 — Roles

Key Role	Description
Buyer	See Terms and Definitions: 3.4
Seller	See Terms and Definitions: 3.15
Catalogue Provider	See Terms and Definitions: 3.6
Catalogue Receiver	See Terms and Definitions: 3.7

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