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 **NBN**



Business Interoperability Interfaces for Public Procurement in Europe - Architecture - Part 115: Semantic Data Type guideline

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Business Interoperability Interfaces for Public Procurement in Europe - Architecture - Part 115: Semantic Data Type guideline

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European foreword

CWA 17025-115, **Semantic Data Type guideline** was developed in accordance with CEN-CENELEC Guide 29 “CEN/CENELEC Workshop Agreements – The way to rapid agreement” and with the relevant provisions of CEN/CENELEC Internal Regulations - Part 2. It was agreed on 2015-12-02 in a Workshop by representatives of interested parties, approved and supported by CEN following a public call for participation made on 2013-02-20. It does not necessarily reflect the views of all stakeholders that might have an interest in its subject matter.

The final text of CWA 17025 was submitted to CEN for publication on 2016-04-20. It was developed and approved by:

- Agency for public Management and eGovernment (DIFI), NO
- Agenzia delle entrate, IT
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- Bundesverband Materialwirtschaft, Einkauf und Logistik e.V, DE
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This CEN Workshop Agreement (CWA) has been drafted and approved by the Workshop on **Business Interoperability Interfaces for Public procurement in Europe (BII)**, phase 3.

CWA 17025 is part of a set of CWAs prepared by CEN WS/BII 3¹:

- CWA 17025:2016 Methodology and Architecture
- CWA 17026:2016 Notification profiles and transactions
- CWA 17027:2016 Tendering profiles and transactions
- CWA 17028:2016 Catalogue profiles and transactions
- CWA 17029:2016 Post-award profiles and transactions

CWA 17025 part 115 replaces CWA16558:2012 Annex H BII Guideline Data Formats.

CWA 17025 consists of:

- CWA 17025-1 Overview and Architecture
- CWA 17025-101 Conformance and Customization Methodology guideline
- CWA 17025-102 Code List and Identifier Management specification
- CWA 17025-103 Business Document and Envelope guideline
- CWA 17025-104 Profile Architecture specification
- CWA 17025-105 Conformance Registry specification
- CWA 17025-106 Open Procurement Data report
- CWA 17025-107 Message Level Response guideline

¹ In order to ease the reading the CWAs provided by the CEN BII initiative, they are also made available on <http://www.cenbii.eu> together with explanatory notes and supporting material. The official version is however the version as published by CEN.

- CWA 17025-108 Use of Digital Signature and Other Trust Services
- CWA 17025-109 Guideline on the Concept of Core
- CWA 17025-110 Profile Maintenance Process specification
- CWA 17025-111 Capturing Business Requirements specification
- CWA 17025-112 Syntax Implementations Guideline Methodology guideline
- CWA 17025-113 Business Rules Description Mechanism guideline
- CWA 17025-114 Attachments Handling guideline
- CWA 17025-115 Semantic Data Type guideline
- CWA 17025-116 Glossary and Business Term Vocabulary
- CWA 17025-203 BDE Syntax Implementation Guideline for Messaging Envelope
- CWA 17025-207 UBL Syntax Implementation Guideline for Message Level Response

A detailed overview of all CWA 17025 parts can be found in CWA 17025 part 1.

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Introduction

The first CEN BII Workshop was established in May 2007 with the objective of harmonising electronic procurement in Europe. The CEN BII initiative, which now comprises a further two CEN Workshops, is a standardisation activity within CEN (European Committee for Standardisation). It provides a framework for interoperability in pan-European electronic transactions expressed as a set of technical specifications.

During the second phase of the initiative (CEN WS/BII 2) a set of technical specifications – “CEN BII Profiles” – were documented and published as five CEN Workshop Agreements (CWAs), which are currently used across Europe. The profiles are designed to facilitate effective public e-procurement based on a modular approach for implementation, with a focus on global interoperability.

The CEN BII profiles can be seen as “agreements” on message contents and business processes. The profile descriptions focus on core information elements that typically cater to the majority of user requirements applicable across Europe and lower the need for detailed bilateral agreements between the trading partners.

In its third phase (CEN WS/BII 3), which began in March 2013 with the approval of the business plan, the Workshop has focused on ensuring that all relevant aspects of e-procurement are covered, including additional business requirements coming from the new Public Procurement Directives and alignment to other standardization efforts in the area of electronic invoicing, as well as ensuring wider recognition and adoption of its deliverables.

More information about the CEN BII initiative can be found on www.cenbii.eu.

The purpose of this guideline is to specify classes and elements used to specify data format.

All datatypes are UN/CEFACT Core Component Technical Specification data types that are defined as W3 datatypes. The data types and their definitions have been updated based on the latest draft of PC 434 guideline on Semantic Data types v9.

(see www.w3.org/TR/xmlschema-0/#SimpleTypeFacets).

More information about the BII initiative can be found on www.cenbii.eu.

CWA 17025-115:2016 (E)**1 Scope**

This CWA is a guideline to the data types used in all BII transactions as defined by the published Profiles.

2 Basic Data Types

Data type content may be of the following basic types.

— String

- A sequence of characters that may contain any character allowed in the UTF-8 character set.
- String values are always case sensitive.

— NormalizedString

- A sequence of characters that may contain any character allowed in the UTF-8 character set except carriage returns, line feeds and tab characters.
- NormalizedString values are always case sensitive.

— Numerical

- Decimal numbers expressed as Arabic numerical characters that can be used for calculations.

— Date

- A sequence of characters representing a single day of a month in a calendar year.

— ByteSequence

- A sequence of bytes not assigned to any specific character set.

3 Semantic data types**3.1 Amount**

Amount has the following attributes:

Attribute	Use	Basic Type	Example	Remark
Currency identification	Optional	Numerical	“EUR”	The currency SHALL either be stated for the document as a whole or for each individual unit price.
Content	XSD:Decimal type	NormalizedString	10000.25	decimals are given with a period “.”, no separators are used for thousands. Decimal is floating up to two digits.