



BSI Standards Publication

Electronic invoicing

Part 3-1: Methodology for syntax bindings of the core elements of an electronic invoice

National foreword

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The UK participation in its preparation was entrusted to Technical Committee IST/34/-/1.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

Electronic invoicing - Part 3-1: Methodology for syntax bindings of the core elements of an electronic invoice

Facturation électronique - Partie 3-1 : Méthodologie applicable aux correspondances syntaxiques des éléments essentiels d'un facture électronique

Elektronische Rechnungsstellung - Teil 3-1: Methodik für die Umsetzung der Kernelemente einer elektronischen Rechnung in eine Syntax

This Technical Specification (CEN/TS) was approved by CEN on 14 May 2017 for provisional application.

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European foreword

This document (CEN/TS 16931-3-1:2017) has been prepared by Technical Committee CEN/TC 434 “Electronic invoicing”, the secretariat of which is held by NEN.

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This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document is part of a set of documents, consisting of:

- EN 16931-1:2017, *Electronic invoicing — Part 1: Semantic data model of the core elements of an electronic invoice*;
- CEN/TS 16931-2:2017, *Electronic invoicing — Part 2: List of syntaxes that comply with EN 16931-1*;
- CEN/TS 16931-3-1:2017, *Electronic invoicing — Part 3-1: Methodology for syntax bindings of the core elements of an electronic invoice*;
- CEN/TS 16931-3-2:2017, *Electronic invoicing — Part 3-2: Syntax binding for ISO/IEC 19845 (UBL 2.1) invoice and credit note*;
- CEN/TS 16931-3-3:2017, *Electronic invoicing — Part 3-3: Syntax binding for UN/CEFACT XML Industry Invoice D16B*;
- CEN/TS 16931-3-4:2017, *Electronic invoicing — Part 3-4: Syntax binding for UN/EDIFACT INVOIC D16B*;
- CEN/TR 16931-4:2017, *Electronic invoicing — Part 4: Guidelines on interoperability of electronic invoices at the transmission level*;
- CEN/TR 16931-5:2017, *Electronic invoicing — Part 5: Guidelines on the use of sector or country extensions in conjunction with EN 16931-1, methodology to be applied in the real environment*;
- FprCEN/TR 16931-6:2017, *Electronic invoicing — Part 6: Result of the test of EN 16931-1 with respect to its practical application for an end user*.

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

Introduction

The European Commission estimates that “The mass adoption of e-invoicing within the EU would lead to significant economic benefits and it is estimated that moving from paper to e-invoices will generate savings of around EUR 240 billion over a six-year period”¹⁾. Based on this recognition “The Commission wants to see e-invoicing become the predominant method of invoicing by 2020 in Europe.”

As a means to achieve this goal, Directive 2014/55/EU [5] on electronic invoicing in public procurement aims at facilitating the use of electronic invoices by economic operators when supplying goods, works and services to the public administration. In particular, it sets out the legal framework for the establishment of a European Standard (EN 16931-1) for the semantic data model of the core elements of an electronic invoice.

The semantic data model of the core elements of an electronic invoice – the core invoice model – as described in EN 16931-1 is based on the proposition that a limited, but sufficient set of information elements can be defined that supports generally applicable invoice-related functionalities.

In line with Directive 2014/55/EU [5], all contracting authorities and contracting entities in the EU will be obliged to receive and process an e-invoice as long as it contains all of the core elements of an invoice defined in EN 16931-1 and provided that it is represented in any of the syntaxes identified in the related Technical Specification CEN/TS 16931-2 “List of syntaxes that comply with EN 16931-1”. This CEN Technical Specification CEN/TS 16931-3-1:2017 defines the method by which the core elements of the invoice should be mapped to a syntax. Subsequent CEN Technical Specifications apply this method and map the core invoice model to syntaxes such as UBL (CEN/TS 16931-3-2), UN/CEFACT XML (CEN/TS 16931-3-3) and the ISO 9735 series (UN/EDIFACT) (CEN/TS 16931-3-4).

By ensuring interoperability of electronic invoices, the European standard and its ancillary European standardization deliverables will serve to remove market barriers and obstacles to trade deriving from the existence of different national rules and standards – and thus contribute to the goals set by the European Commission.

1) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0712:FIN:en:PDF>.

1 Scope

This Technical Specification (TS) specifies the methodology of the mapping between the semantic model of an electronic invoice, included in EN 16931-1 and a syntax. For each element in the semantic model (including sub-elements or supplementary components such as Identification scheme identifiers) it should be defined which element in the syntax is to be used to contain its information contents. Any mismatches between semantics, format, cardinality or structure are indicated.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 16931-1, *Electronic invoicing — Semantic data model of the core elements of an electronic invoice*

CEN/TS 16931-3-2:2017, *Electronic invoicing — Part 3-2: Syntax binding for ISO/IEC 19845 (UBL 2.1) invoice and credit note*

CEN/TS 16931-3-3:2017, *Electronic invoicing — Part 3-3: Syntax binding for UN/CEFACT XML Industry Invoice D16B*

CEN/TS 16931-3-4:2017, *Electronic invoicing — Part 3-4: Syntax binding for UN/EDIFACT INVOIC D16B*

ISO 15000-5:2014, *Electronic Business Extensible Markup Language (ebXML) — Part 5: Core Components Specification (CCS)*

3 Terms and definitions

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

3.1

electronic invoice

invoice that has been issued, transmitted and received in a structured electronic format which allows for its automatic and electronic processing

[SOURCE Directive 2014/53/EU [5]]

3.2

semantic data model

structured set of logically interrelated information elements

3.3

information element

semantic concept that can be defined independent of any particular representation in a syntax

3.4

syntax

machine-readable language or dialect used to represent the information elements contained in an electronic document (e.g. an electronic invoice)