TECHNICAL SPECIFICATION

SPÉCIFICATION TECHNIQUE

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English Version

Electronic invoicing - Part 2: List of syntaxes that comply with EN 16931-1

Facturation électronique - Partie 2: Liste de syntaxes conformes avec EN 16931-1

Elektronische Rechnungsstellung - Teil 2: Liste der Syntaxen, die die EN 16931-1 erfüllen

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (CEN/TS 16931-2:2017) has been prepared by Technical Committee CEN/TC 434 "Electronic invoicing", the secretariat of which is held by NEN.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2014/55/EU [2].

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

— CEN/TR 16931-6[1] Electronic invoicing - Part 6: Result of the test of the European standard with respect to its practical application for an end user - Testing methodology

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Standard: 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.

[1] In preparation.

Introduction

The European Commission states 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” [3]. 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 [2] 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 (B2G) as well as support for the trading between economic operators themselves (B2B). In particular, it sets out the legal framework for the establishment and adoption of a European standard (EN) for the semantic data model of the core elements of an electronic invoice (EN 16931-1:2017).

The core invoice model as described in EN 16931-1:2017 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 [2], and after publication of the reference to EN 16931-1:2017 in the Official Journal of the European Union, all contracting public authorities and contracting entities in the EU will be obliged to receive and process an e-invoice as long as:

— it is in conformance with the semantic content as described in EN 16931-1:2017;

— it is represented in any of the syntaxes identified in CEN/TS 16931-2, in accordance with the request referred to in paragraph 1 of article 3 of the Directive 2014/55/EU;

— it is in conformance with the appropriate mapping defined in the applicable subpart of CEN/TS 16931-3.

This CEN Technical Specification provides the conclusions following the assessment of the following four syntaxes:

- UN/CEFACT Cross Industry Invoice XML message as specified in XML Schemas 16B (SCRDM - CII);
- UN/EDIFACT INVOIC message as present in the United Nations rules for Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT) [8] directory version D.14B [10];
- UBL invoice and credit note messages as defined in ISO/IEC 19845:2015;
- Financial Invoice FinancialInvoiceV01 message [9] based on ISO 20022.

The assessment was based on the criteria provided by the Standardization Request [1] issued in accordance with the provisions of Article 3 of Directive 2014/55/EU [2].

EN 16931-1:2017 and its ancillary standardization deliverables will enable semantic interoperability of electronic invoices, and help remove market barriers and obstacles to trade deriving from the existence of different national rules and standards – and thus contributing to the goals set by the European Commission.

1 Scope

This Technical Specification provides in Clause 7 the list of syntaxes that complies with and allows to express syntactically the core invoice model as specified in EN 16931-1:2017, according to the selection criteria provided by the Standardization Request [1].

The selection of the syntaxes also derived from the Standardization Request [1]. It states that, to limit costs on public authorities, the list should ideally not exceed five syntaxes. Four syntaxes were taken into account and assessed according to criteria provided by the Standardization Request [1].

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 16931-1:2017, *Electronic invoicing - Part 1: Semantic data model of the core elements of an electronic invoice*

ISO/IEC 19845:2015[2], *Information technology — Universal business language version 2.1 (UBL v2.1)*

UN/CEFACT *Cross Industry Invoice in XML Schemas 16B (SCRDM - CII)*[3]

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 16931-1:2017 apply.

4 Approach

EN 16931-1:2017 defines a semantic model of the core elements of an electronic invoice. The purpose of the core semantic invoice model is to facilitate computer applications to generate electronic invoices and then for other applications to receive and process those invoices automatically. These electronic invoices are electronically transmitted and received, without the need for prior bilateral agreement on the content or elements of the invoice. However, in order to exchange electronic invoices, the model elements need to be represented in a “syntax”. A syntax specification allows the computer systems to identify the content (element values) as part of a data stream.

CEN/TC 434 identified a short list of syntaxes based on the syntaxes mentioned in the Standardization Request [1]: UN/CEFACT XML, UN/EDIFACT [8], OASIS UBL, and Financial Invoice (based on ISO 20022) [9].

Table 1 shows the technology stack of the four syntaxes and respective versions by illustrating the base syntax, the names and versions of e-Invoicing messaging standards as well as the code-list versions.

[2] Available also as OASIS UBL v2.1 at http://docs.oasis-open.org/ubl/os-UBL-2.1/UBL-2.1.pdf

[3] Available at http://www.unece.org/cefact/xml_schemas/index