



BSI Standards Publication

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

National foreword

This Published Document is the UK implementation of CEN/TR 16931-5:2017.

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.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2017
Published by BSI Standards Limited 2017

ISBN 978 0 580 97023 8

ICS 35.240.63; 35.240.20

Compliance with a British Standard cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 30 September 2017.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

TECHNICAL REPORT

CEN/TR 16931-5

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

July 2017

ICS 35.240.20; 35.240.63

English Version

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

Facturation électronique - Partie 5: Lignes directrices pour l'utilisation des extensions de secteur ou de pays conjointement avec la Norme européenne, avec une méthodologie à appliquer dans l'environnement réel

Elektronische Rechnungsstellung - Teil 5: Leitfaden über die Verwendung von branchen- oder länderspezifische Erweiterungen der EN 16931-1 einschließlich einer im realen Umfeld einzusetzenden Methodik

This Technical Report was approved by CEN on 14 May 2017. It has been drawn up by the Technical Committee CEN/TC 434.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

Contents

Page

European foreword.....	3
Introduction	4
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions	6
4 The challenge of interoperability.....	7
4.1 Interoperability through standardization	7
4.2 The challenge.....	7
4.3 The purpose of extension specifications	8
4.4 Who will develop extension specifications and why?.....	8
5 Conformance.....	9
5.1 Conforming objects.....	9
5.2 Conformance of the extension specifications	9
5.3 Conformance of sending or receiving party	9
5.4 Conformance of an invoice instance document.....	10
6 Extension specification rules.....	10
6.1 Introduction to extension specification rules.....	10
6.2 What may be specified in an extension specification	10
6.3 Documentation of extension specifications	12
6.4 Publication of specifications	12
6.5 Mapping to syntax.....	12
6.6 Relation between extension specifications	12
6.7 Governance of extension specifications	12
6.8 Identification of extension specifications	13
6.9 Validation.....	13
7 The methodology.....	14
7.1 How do parties agree on using an extension.....	14
7.2 Process for defining extensions	14
7.3 Statement of objective	16
7.4 Gathering of business requirements.....	16
7.5 Mapping against norms.....	16
7.6 Re-evaluate requirements and/or re-evaluate processes	16
7.7 List requirements.....	17
7.8 Define required changes.....	17
7.9 Create specification	17
7.10 Evaluate type of changes	17
7.11 Publish extension specification	18
7.12 Bind to syntax.....	18
Bibliography.....	19

European foreword

This document (CEN/TR 16931-5:2017) 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.

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*.

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” [1]. Based on this recognition “The Commission wants to see e-invoicing become the predominant method of invoicing by 2020 in Europe [1].”

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 public administrations (B2G), as well as the support for 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).

In line with Directive 2014/55/EU [2], and after publication of the reference to EN 16931-1 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;
- 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 Directive 2014/55, EU;
- it is in conformance with the appropriate mapping defined in the applicable subpart of CEN/TS 16931-3 (all parts).

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.

It is expected that in most situations, business partners would use the core invoice model exclusively and the invoices they send or receive would not need to contain any additional structured information elements. However, in some sectors or situations where there are specific additional information requirements, the required information may be conveyed in the form of unstructured text. Unstructured text has the drawback that it cannot be processed automatically and therefore requires human intervention. Alternatively, the specific information requirements can be implemented using information elements that extend the core invoice model. In these circumstances, it should be possible to define a number of required additional information elements whilst still utilizing the concepts of the core invoice model.

In other situations, additional guidance or restrictions on the use of the information elements already defined in the core invoice model may be required and documented in a core invoice usage specification as outlined in EN 16931-1.

In order to comply with the provisions of Directive 2014/55/EU [2], guidelines on the optional use of extensions to the core invoice model, including a methodology to be applied in the real environment, are needed. This technical report provides this methodology and complies at least with the following criteria:

- it is technologically neutral;
- it is compatible with relevant international standards on electronic invoicing;

- it has regard to the need for personal data protection in accordance with Directive 95/46/EC [3], to a 'data protection by design' approach and to the principles of proportionality, data minimization and purpose limitation;
- it is consistent with the relevant provisions of Directive 2006/112/EC [4];
- it allows for the establishment of practical, user-friendly, flexible and cost-efficient electronic invoicing;
- it takes into account the special needs of small and medium-sized enterprises as well as of public central contracting authorities and contracting entities;
- it is suitable for use in commercial transactions between enterprises.

The methodology and rules described in this document are based on the following key design principles:

- Extension specifications are used to provide user communities with the ability to add information elements or functions to the core invoice model in order to support their specific business requirements.
- An extension specification is not intended to be used to specify legally required information elements and expected to be mandatory by law. However, the further specification of specific legal requirements may be stated in an extension specification in bilateral agreements.
- Information provided in supplementary documents (attachments) to an invoice are not considered to be extensions, as these are an integral part of the core invoice model.
- Extension specifications should not be used to remove information elements from the core invoice model, only to add information elements.
- An extension is defined in an extension specification.
- Extension specifications should be made publicly available in an appropriate repository in order to foster awareness and reuse, and this is expected to foster convergence over time (see 6.7).
- Reuse the syntax binding methodology applied to EN 16931-1.
- The actual implementation and use of an extension specification is subject to agreement between the trading partners.

1 Scope

This Technical Report describes how trading partners may extend the core invoice model and the related business rules and code lists, in order to support business cases that are specific to their trading environment, while at the same time maintaining semantic interoperability with the core invoice model.

This Technical Report does not define a methodology for creation of core invoice usage specification, nor does it describe the detailed process of syntax binding.

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*

CEN/TS 16931-3-1, *Electronic invoicing — Part 3-1: Methodology for syntax binding of the core elements of an electronic invoice*

CEN/TS 16931-3-2, *Electronic invoicing — Part 3-2: Syntax binding for ISO/IEC 10845 (UBL 2.1) invoice and credit note*

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

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

3 Terms and definitions

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

3.1 core invoice usage specification
specification that provides additional explanations and examples, as well as (business) rules related to the actual implementation and use of the core invoice model in a specific trading situation

3.2 invoice instance document
individual electronic invoice

3.3 core invoice instance document
instance of an electronic invoice that is compliant to a core invoice usage specification

3.4 extended invoice instance document
electronic invoice instance document that is compliant to an extension specification

Note 1 to entry: An extended invoice instance document is then also conformant to the core invoice model.