PD CEN/TR 16931-4:2017

BSI Standards Publication

Electronic invoicing

Part 4: Guidelines on interoperability of electronic invoices at the transmission level

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National foreword

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Elektronische Rechnungsstellung - Teil 4: Leitfaden über die Interoperabilität elektronischer Rechnungen auf der Übertragungsebene

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Full document details: PD CEN/TR 16931-4:2017

Contents

Page

European foreword ... 3
Introduction ... 4
1 Scope ... 6
2 Normative references ... 8
3 Terms and definitions ... 8
4 The challenge of interoperability at the transmission level ... 9
4.1 Definition of Interoperability ... 9
4.2 The current market reality for e-Invoicing ... 9
5 Guidelines ... 11
5.1 Common terminology ... 11
5.2 Best practices for transmission and related network services ... 11
5.3 Use of common technology standards at the transmission level ... 12
5.4 Identification, addressing and routing ... 13
5.5 Authenticity and integrity ... 14
5.6 Data protection ... 15
5.7 Implications of format conversion services at the transmission level ... 15
5.8 The role of visual presentations (for legibility) including 'hybrid' invoices ... 16
5.9 Guidance for the implementation of Operating Models ... 17
5.9.1 Introduction ... 17
5.9.2 Specific additional Guideline regarding Direct Connection (Bilateral) models ... 17
5.9.3 Specific additional Guideline regarding three-corner models ... 18
5.9.4 Specific additional Guideline regarding four-corner models ... 18
5.10 The need for legally binding agreements at the transmission level ... 18
Annex A (informative) Legislation summary ... 20
Annex B (informative) Abbreviations ... 21
Bibliography ... 23

Documents
Document Sharing Hub
Full document details: PD CEN/TR 16931-4:2017

European foreword

This document (CEN/TR 16931-4:2017) 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*.

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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".

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 Standardization Request issued by the European Commission in connection with Directive 2014/55/EU requested that CEN should also develop Guidelines on interoperability of electronic invoices at the transmission level, taking into account the need of ensuring the authenticity of the origin and the integrity of the electronic invoices' content, to be given in a Technical Report (TR)

The Guidelines cover interoperability at the transmission level for invoices based on the core invoice model and its syntax representations to and from the involved trading and supporting parties. They could also be applied more widely to cover the transmission of electronic invoices rendered in other standards and formats i.e. they are invoice content and format neutral.

The Guidelines for interoperability at the transmission level (the Guidelines) are intended to guide all stakeholders who make use of e-Invoicing within the European Union (EU) and the European Economic Area (EEA), and Switzerland. They are addressed to trading parties, service and software providers in relation to the transmission methods or network solutions they use or support, in order to encourage the adoption and further development of good practices, recommendations and standards for the transmission level. This is intended to promote efficient, cost effective and widely available e-Invoicing practices and services.

It is expected that some groups of stakeholders, such as small and medium-sized businesses (SMEs) and smaller contracting authorities, may find these Guidelines inherently technically challenging and inaccessible at a practical level. This is recognized, and consequently it is important that at a context-specific level e.g. at Member State or Sector level, policy-makers, larger contracting authorities, SME representative and municipal associations, supportive government agencies, professional advisers, and service and solution providers take responsibility to guide such organizations in relation to these Guidelines. It is by the nature of the Guidelines that the provision of further specific guidance for SMEs and smaller contracting authorities could not be done at a European level, but rather at national and sector-specific level,

It is recommended that the Guidelines set out herein are adopted by market participants, in such a way that separate and competing approaches, solutions and networks find common ground at the

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transmission level, and on the basis of which trading parties are able to reach the maximum number of their counterparties in a convenient manner. The Guidelines leave as many aspects as possible as a matter of choice or in the competitive domain by only focusing on those features of transmission that are essential to establishing interoperability.

It is envisaged that a large number of network and network-based solution instances will subscribe to and adopt the Guidelines. There is a clear separation between the Guidelines and the design and implementation of individual network and transmission solutions, which range from use of the 'open' Internet through virtual private Networks and managed services. The Guidelines are neutral as to the individual interoperability models that the market develops and uses to accelerate the mass adoption of e-Invoicing.

The following EU stakeholders have been consulted in addition to the Members of CEN/TC 434 and their supporting National Standards Organizations (NSOs):

— European Multi Stakeholder Forum on e-Invoicing;

— European Commission units responsible for EU Large Scale Pilots, in particular e-SENS – DIGIT, DG CONNECT, DG GROW, and for the Connecting Europe Facility (CEF) in particular the Digital Service Infrastructure for e- Delivery;

— OpenPEPPOL Association;

— European E-invoicing Service Providers Association (EESPA).

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1 Scope

This Technical Report recommends a set of Guidelines to ensure interoperability at the transmission level to be used in conjunction with the European Norm (EN) for the semantic data model of the core elements of an electronic invoice and its other associated deliverables. The Guidelines are by nature non-prescriptive and non-binding.

These Guidelines take into account the following aspects:

1) recommending best practices for use at the transmission level;

2) supporting interoperability between all the parties and systems that need to interact and within the various operating models in common use;

3) ensuring a level playing field for the various operating models and bi-lateral implementations and for the use of existing and future infrastructures, which support e-Invoicing;

4) promoting a common terminology and non-proprietary standards for transmission and related areas;

5) ensuring the authenticity of origin and integrity of electronic invoice content;

6) providing guidance on data protection, on the enablement of format conversion, and on e-invoice legibility, including the use of a readable visual presentations, as required;

7) providing guidance for identification, addressing and routing;

8) identifying requirements for robust legal frameworks and governance arrangements;

9) recognizing the roles of trading parties, solution and service providers and related infrastructure providers.

The Objectives of the Guidelines are:

10) to support the implementation of the EU Directive 2014/55/EU on e-Invoicing and the core invoice model;

11) to propose best practices and recommendations for standards to enable electronic exchange of e-Invoices and related data between participants by providing a basis for interoperability at the transmission level, based on common requirements and scenarios;

12) to facilitate Straight Through Processing (STP) by the key actors in the supply chain (Buyers, Sellers, Tax Authorities, Agents, Banks, Service and Solution Providers, etc.);

13) to provide a set of non-prescriptive and non-binding Guidelines and recommendations that are applicable to all common operating models for e-invoice exchange and transmission whilst also providing recommendations specific to each of the common operating models.

To accomplish these objectives, the Guidelines are based on the following Requirements and Guiding Principles:

14) the need to cover the transmission of e-invoices and related documents from the system of the sending trading party to the system of the receiving trading party, including transmission issues for any intermediary platforms;

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15) the need to allow any seller in any European (EU, EEA and Switzerland) country to deliver invoices to any buyer in any location in another European country (EU, EEA and Switzerland);

16) the need to support all common invoicing processes and modes of operation;

17) the need to be compatible with the current legislative and regulatory environment for the exchange of e-Invoices and related data;

18) the need to support the European Norm and other commonly accepted content standards;

19) the need to ensure that other document exchanges beyond e-Invoicing can be supported;

20) the need to establish clear boundaries between the collaborative and competitive domains;

21) the need to enable competition between business models, solutions and service providers and foster innovation;

22) the need to ensure that European supply chains remain an integrated and competitive part of the global economy;

23) the need to promote network effects leading to the development of critical mass as e-Invoicing becomes the dominant mode of invoicing (network effects result in a service becoming more valuable as more trading parties use it, thus creating a virtuous circle and further momentum for adoption).

The following items are considered to be in the competitive domain and therefore out of scope of the Recommendations:

24) Private entity space: the private entity space meaning the internal functionality or behaviour of any individual sender and receiver of invoices and their solution and service providers.

25) Schemes and community solutions: as described above, the creation of these Guidelines for interoperability at the transmission level is considered to be a collaborative activity. Individual schemes, operating models, networks and network-based solutions at a European, national, global, or sector level are considered as lying in the competitive domain for the purposes of these Guidelines.

26) Choice of networks and technical solutions: the usage of any particular network or technical solution by any community or bilateral pair of service providers is a private competitive matter.

27) Service offerings: the actual utilization of the Guidelines in relation to a commercial service offering is a commercial activity and therefore out of scope.

28) Business integration: the integration of services with other processes, systems or solutions is in the competitive domain, as is storage and archiving.

29) Pricing: pricing and contractual arrangements in any form are in the competitive domain.

30) Legal and tax compliance: steps taken to ensure compliance with legal and tax requirements are private obligations of taxable persons.

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