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Elektronsko izdajanje računov - 7. del: Metodologija za razvoj in uporabo strukturirane specifikacije uporabe osrednjega računa (CIUS), skladne s standardom EN 16931-1

Electronic invoicing - Part 7: Methodology for the development and use of EN 16931-1 compliant structured Core Invoice Usage Specifications

Elektronische Rechnungsstellung - Teil 7: Methode zur Entwicklung und Anwendung einer Anwendungsspezifikation der Kernrechnung nach EN 16931-1

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**Electronic invoicing - Part 7: Methodology for the
development and use of EN 16931-1 compliant structured
Core Invoice Usage Specifications**

Elektronische Rechnungsstellung - Teil 7: Methode zur
Entwicklung und Anwendung einer
Anwendungsspezifikation der Kernrechnung nach EN
16931-1

This Technical Specification (CEN/TS) was approved by CEN on 15 December 2019 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (CEN/TS 16931-7:2020) 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.

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

To achieve this goal, Directive 2014/55/EU 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. The Directive sets out the legal framework for the establishment and use of a European Standard (EN) 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, is based on the proposition that a quite limited, but sufficient set of information elements can be defined that supports generally applicable invoice-related functionalities. The core invoice model contains information elements that are commonly used and accepted including those that are legally required.

A “Core Invoice Usage Specification” (CIUS) is a specification that provides a seller with detailed guidance, explanations and examples, as well as rules (business rules) related to the actual implementation and use of structured information elements present in the core invoice model in a specific trading situation. An instance document created following a given CIUS will always be compliant with the European Standard.

A receiving party may only claim compliance to the core invoice model if he accepts invoices that comply with the core invoice model in general, or with a CIUS, that is itself compliant with the core invoice model. A sending party may claim compliance if he sends invoices that comply with the core invoice model, including those issued in accordance with a compliant CIUS.

This specification aims to give guidance on the creation and implementation of a CIUS with a quality control objective. Therefore it is necessary to define a clear set of criteria which a CIUS will comply with before the CIUS can be registered in the appropriate registry. Some of these criteria will be validated automatically while others are not.

To hinder excessive proliferation and to guide implementation, publication of CIUSs in a registry is mandatory and the use of a machine processable format is recommended.

1 Scope

This document applies in case a CIUS is produced as a specification with the objective of registering it in the appropriate registry. This document also establishes requirements for the steps to be taken in the process of creating Core Invoice Usage Specifications (CIUS) as defined in EN 16931-1. Furthermore, this document provides guidance for the creation and implementation of a CIUS.

The following points are the focus:

- steps that need to be taken in consideration to avoid unnecessary proliferation and fragmentation in the use of CIUSs;
- guidance on the creation and implementation of CIUSs, with a quality control objective.

It should be noted that it is planned to apply the same principles and processes to extensions that are documented in a separate document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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 16931-3-1:2017, *Electronic invoicing — Part 3-1: Methodology for syntax bindings of the core elements of an electronic invoice*

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*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp/ui>

3.1

Core Invoice Usage Specification

CIUS

specification that provides a seller with detailed guidance, explanations and examples, as well as rules (business rules) related to the actual implementation and use of structured information elements present in the core invoice model in a specific trading situation

[SOURCE: EN 16931-1:2017]

CEN/TS 16931-7:2020 (E)**3.2****extension specification**

specification that describes the use of additional information elements, i.e. information elements not defined in the core invoice model, or alterations that add functionality

[SOURCE: EN 16931-1:2017 and CEN/TR 16931-5:2017]

3.3**compliant invoice instance**

invoice instance that respects all rules defined for the core invoice model, which could include the specification contained in a compliant CIUS

[SOURCE: EN 16931-1:2017]

3.4**structured CIUS**

CIUS that can be registered in the appropriate registry and therefore complies with the specifications in this document

3.5**appropriate registry**

registry defined by the CEN Technical Board with the task of implementing the requirements of a European Standard when the said requirements involve the assignment and registration of unique, unambiguous names according to the procedures described in the European Standard

4 Compliance (Source: EN 16931-1:2017)**4.1 General**

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Compliance to the core invoice model, can be measured at three levels:

- at the level of specifications;
- the actual implementation of a given sender or receiver;
- the individual invoice instance documents.

Each of these levels is discussed in 4.2 to 4.4.

4.2 Compliance of the core invoice usage specifications

The core invoice usage specifications that are used in conjunction with the core invoice model shall themselves comply to the methodology and rules described in this guideline and expressed in the following criteria:

- the specification shall clearly state what business functions and/or legal requirements it is intended to support;
- the specification shall clearly state its issuer and responsible 'governor';
- the specification shall clearly state in what way the requirements of the CIUS differ from the core invoice model, either by documenting the difference only or by specifically pointing out what the differences are;
- the resulting invoice document instance shall be fully compliant to the core invoice model.

- the specification and, when relevant, its version shall be uniquely identifiable both for referencing and for identification in processing;
- the specification shall state its underlying specifications (the core invoice model as well as other specifications that it may build upon);
- the syntax binding of a specification shall follow the syntax binding methodology defined in CEN/TS 16931-3-1. See Table 1.

Table 1 — Allowed specifications in a CIUS as defined in CEN/TS 16931-3-1:2017, 7.3.2

Type of change	Example/remark
Business Terms	
Mark conditional Information element not to be used	Can be achieved by changing cardinality 0..x to 0..0. This essentially means that an element which use is conditional is not to be used. This will not affect the receivers processing. Care need to be taken to ensure that the business rules defined for the core invoice model are not broken.
Make semantic definition narrower	A narrower semantic definition of a business term means that the meaning conveyed is still within the meaning defined in the core invoice model and is already recognized by the receiver.
Add synonyms	As synonyms will only supplement the original business terms but do not replace it - the original term is still normative. A receiver who has designed his processing based on the core invoice model can continue to do so. Examples of synonyms are mapping of national or sector terminology to the terminology used in the core invoice.
Add explanatory text	Adding explanatory text that, for example, explains how a business term is used in a specific use case. There is a risk is that such text may also affect the semantic definition and this shall be avoided. Explanatory information does not require any further action from the receiver and the automatic processing of the assigned invoice is still possible.
Cardinality	
Make a conditional element mandatory (0..x -> 1..x)	If a conditional element is made mandatory it simply means that the option of using it is applied. The receiver shall be prepared for the situation that a conditional element is used, so he does not need to modify his processing.
Decrease number of repetitions (x..n -> x..1)	If the number of repetitions is decreased they will remain within the limit that the receiver has catered for.
Semantic data type	
Change semantic data type from string to ...	If the semantic data type of a business term is changed from string to some other type the receiver can still process the value as a string.

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Type of change	Example/remark
Codes and identifiers	
Remove one of multiple defined lists	Where the core invoice semantic model defines more than one allowed list and the core invoice usage specification reduces the number of allowed lists then the invoice instance document is still conformant. However such a change shall leave at least one of the defined lists in place.
Mark defined values as not allowed	If the allowed code values are restricted within an existing list it simply means that certain values of the full list are being used and the receiver should have designed for processing them.
Business Rules	
Add new non-conflicting business rule for existing element(s)	Represents an additional restriction on the allowed content within what is defined for the core invoice model. The receiver should therefore have designed for that content.
Make an existing business rule more restrictive	The exchanged content of the business term remains within what was defined for the core invoice model and the receiver should have designed for it.
Value domain for an element	
Restrict text or byte array length	If a maximum is set on the length where there was no limit the content remains within what was defined for the core invoice model.
Require defined structured values	When the core invoice model does not set a structure on a value the receiver would not have designed for processing in any particular form. Rules to enforce a given pattern should therefore not affect his processing.
Restrict allowed fraction digits	Fewer fraction digits result in a value that is within the accuracy that the receiver would have designed for when implementing the core invoice model.

4.3 Compliance of sending or receiving party

A receiving party may only claim compliance to the core invoice model if he accepts invoices that comply with the core invoice model in general, or with a CIUS, that is itself compliant with the core invoice model.

A sending party may claim compliance if he sends invoices that comply to the core invoice model, including those issued in accordance with a compliant CIUS.

4.4 Compliance of an invoice document instance

An invoice document instance is compliant to the core invoice model if it respects all rules defined for the core invoice model, which may include the specification contained in a compliant CIUS.

If an invoice instance document supports requirements that can be considered as a use of a CIUS, the invoice instance document is still compliant to the core invoice model. These invoice instance documents

can still be received and processed by a party who is not supporting the CIUS because it still complies to the rules of the core invoice model.

5 Premises

The CIUS has already been subject to extensive discussions, comments, decisions and actual implementations, all of which shall be taken into consideration and contribute to the premises for this work:

- CIUS as a concept is described in the EN 16931-1, together with the types of specifications and/or restrictions that are allowed in a CIUS in order to ensure its compliance with the EN 16931-1;
- other reports generated within CEN/TC 434 and in the European Multi-Stakeholder Forum on e-Invoicing have already made important recommendations on implementing CIUSs e.g. EMSFEI's "Recommendation on the use of 'Core Invoice Usage Specifications' (CIUS)";
- the relationship with ongoing CEN/TC 434 standardization activities.

6 Issues that should be considered to avoid unnecessary proliferation

6.1 General

Various factors will influence the quantity and quality of CIUSs, and each of these should be discussed.

6.2 When should a CIUS be created?

Aside from considerations as to who can issue a CIUS, there is a need to consider when its issuance can be justified.

The concept of CIUS is mainly to enable buyers to establish restriction specifications needed for correctly processing the invoice and progressing towards payment. The buyers communicate to invoice issuers which information they need and it is in the interest of suppliers to provide the information as required by their customers.

In discussions on CIUSs the question has been raised as to whether simple specifications and/or restrictions on the use of information elements composing the EN should be treated as a CIUS or whether these are simply part of the contract between trading parties. The discussions indicate that there are different views on when it is necessary to create a CIUS, but there seems to be a general consensus to minimize the number of CIUSs and to recommend that a CIUS should only be considered if:

- a) there is a strong business or legal requirement to further restrict or clarify the specifications in the EN;
- b) there is no existing CIUS that covers the requirement (e.g. a sector CIUS or a CIUS made available through an infrastructure such as PEPPOL or a national platform);
- c) the CIUS is likely to apply to a large number of trading parties within a grouping such as a public sector, sub-sector of the public sector or a private sector community with common requirements;
- d) the CIUS doesn't create cross border trade barriers.

CEN/TS 16931-7:2020 (E)**6.3 Who can issue a CIUS?**

The following parties, among others, may issue a CIUS:

- a) CEN/TC 434 itself;
- b) CEN National Standards Bodies (NSBs);
- c) CEN/TC 434 Liaison Organizations;
- d) member states;
- e) bodies representing a public sector or business community;
- f) national or European stakeholder fora;
- g) national or European e-invoicing fora;
- h) others (e.g. single buyer and single supplier).

Before mandating a CIUS, single buyers or suppliers should carefully consider whether there is a sufficient business case and whether they can exercise sufficient impact or influence on their trading partners to make the CIUS operative. This aspect is discussed below in the section 'Steps for the issuer of the CIUS'.

6.4 How to create a CIUS?

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The tools and other help like templates and support that are made available to the issuer of the CIUS will have impact on both the quantity and quality of the CIUSs.

An example of such a capability is an appropriate registry as specified by CEN/TC 434 where search facilities will provide extensive information on individual CIUSs, their associated rules, practices and minimum requirements.

6.5 Formalization

The degree of formalization will also strongly influence the degree of proliferation and render more uniform the specification and the publication of a structured CIUS. This will make it easier for both issuers and implementers of a CIUS to search, identify, compare, create and implement a CIUS. The list below specifies the minimum degree of formalization:

- a) as a minimum, a machine processable representation according to this specification with the necessary information to identify and describe the CIUS shall be completed;
- b) the CIUS shall be published in the appropriate registry;
- c) any specific business rules shall be defined and listed with a unique identifier and, when appropriate, validation artefacts shall be created;
- d) simple instructions how to apply the CIUS shall be provided to facilitate the invoice preparation and to avoid errors;
- e) sample files shall be provided;
- f) the specification and, when relevant, its version shall be uniquely identifiable both for referencing and for identification in processing.