



**NSAI**  
Standards

Irish Standard Recommendation  
S.R. CEN/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

**S.R. CEN/TR 16931-6:2017**

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## National Foreword

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TECHNICAL REPORT

CEN/TR 16931-6

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**Electronic invoicing - Part 6: Result of the test of EN  
16931-1 with respect to its practical application for an end  
user**

Facturation électronique - Résultat de l'essai portant  
sur la Norme européenne concernant sa mise en  
application pratique pour un utilisateur final

Elektronische Rechnungsstellung - Ergebnis der  
Prüfung der EN 16931-1 auf ihre praktische  
Anwendbarkeit durch einen Endnutzer

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## European foreword

This document (CEN/TR 16931-6:2017) 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 [and/or CENELEC] 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 Cross 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 16931-6:2017 Electronic invoicing - Part 6: Result of the test of the European standard with respect to its practical application for an end user

## CEN/TR 16931-6:2017 (E)

### 0 Introduction

#### 0.1 Summary

The Technical Report contains the results of the testing. In summary, it should demonstrate that EN 16931-1 and its related specifications, particularly the syntax bindings, is fit for purpose.

The report has three main sections, one for the semantic testing where an overview of the methodology, the testing and the results are described (Clause 4). The second section (Clauses 5 to 8) is the syntax testing, and this is split in different subchapters to test all the steps needed to create and send an invoice instance. The final section (Clauses 9 to 10) describes the tests performed to ensure the EN is suitable for automatic processing. This section has two sub chapters, one for payments and one for automatic processing in general.

#### 0.2 Requirements for testing derived from European legislation

Article 3 of Directive 2014/55/EU [1] states that:

“The Commission shall request that the relevant European standardisation organisation draft a European standard for the semantic data model of the core elements of an electronic invoice (the ‘European standard on electronic invoicing’).

The Commission shall require that the European standard on electronic invoicing 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 [2],
- it allows for the establishment of practical, user-friendly, flexible and cost-efficient electronic invoicing systems,
- it considers the special needs of small and medium-sized enterprises as well as of sub-central contracting authorities and contracting entities,
- it is suitable for use in commercial transactions between enterprises.”

Further on in article 3 the Directive [1] explicitly describes the task of testing:

- “the standard shall be tested as to its practical application for an end user.
- during the performance of the test, special account be taken of the respect for the criteria of practicality, user-friendliness and possible implementation costs”

Testing is also described in note 28 of Directive 2014/55/EU [1]:

“Prior to the introduction of the European standard on electronic invoicing in the Member States, the practical application of the standard should be sufficiently tested. This assessment should be done during the drawing up of the standard. That assessment should involve end users, and should address aspects of practicality and user-friendliness, and should demonstrate that the standard can be implemented in a cost efficient and proportionate manner.”

# 1 Scope

## 1.1 Introduction

Directive 2014/55/EU states the following: “the standard shall be tested as to its practical application for an end user. The Commission shall retain overall responsibility for the testing and shall ensure that, during the performance of the test, special account be taken of the respect for the criteria of practicality, user-friendliness and possible implementation costs in accordance with the second subparagraph of paragraph 1.”

## 1.2 In scope

This CEN Technical Report describes the methodology used for testing at a semantic level and at the syntax level, as well as describing the semantic testing, the syntax testing and testing of the validation artefacts that represent EN 16931-1 and the test results. The testing of the validation artefacts will ensure they can be used to automatically check conformance with EN 16931-1.

## 1.3 Out of scope

During meetings with the European Commission they agreed to supplement the testing activities as the need arises. This included the provision of a hosted GITB (Global eBusiness Interoperability Test Beds) environment for syntax testing and to run separate studies such as assessment of implementation costs. The results of these studies will be published separately by CEF.

It was agreed at earlier meetings that piloting was out of scope i.e. perform live transactions, because resources were unavailable to undertake this in the time allowed. Instead we could simulate scenarios by leveraging on the experience of our experts.

Working Group 3 (hereafter WG3) in CEN/TC 434 has produced the syntax bindings and validation artefacts, and the task of quality assurance of these deliverables has been the responsibility of WG3.

VAT issues are complex and require juridical or legal expertise. VAT is also sometimes very sectoral or even country specific. Certain sections, in the VAT Directive, apply to all trades, others deal with special cases. The model should facilitate, but cannot be seen as an enforcement model. Therefore, VAT compliance would have to be checked on a case by case basis, and is deemed out of scope. The Commission had taken this up and given the draft to their VAT experts. The result was that no issues were discovered.

Article 226(B) of the VAT Directive [2] describes the simplified invoice. There are significantly fewer requirements for this invoice. It can only be used when the value is below a specific total amount. The requirement is to provide a model for low value purchases such as train tickets, receipts etc. The key difference is that it doesn't require the Buyer to be identified. Due to limited resources the simplified invoice requirements were not checked and so are being considered as an extension to be developed at a future stage.

The changing between form and format was discussed. It was generally agreed, based on the VAT Directive, that an eInvoice cannot change form i.e. transformed to paper, however it can change format i.e. syntax. This is common in EDI systems and for legal reasons the original needs to be clarified. This means if it is in paper form it shall be archived in paper form and if it is electronic it shall stay in electronic form. An electronic invoice may change format, provided this is documented in an audit trail. However, in Norway and France the legislation states that the format received from the Supplier is the original and no other. Also, general practice in Germany requires that the invoice received from the Supplier be archived and considered as the original. There may be other exceptions in some Member States. This was also considered to be out of scope for this document and would be dealt with by the Member State involved.

It was agreed at an initial Plenary session that we should test all four syntaxes as the decision to select syntaxes had not yet been made. However ultimately the group concluded, based on our research, that

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the ISO 20022 Financial Invoice was not in sufficient use to justify being included. It was agreed at a plenary session that the work could be dropped, and testing against ISO 20022 Financial Invoice is deemed out of scope. The expert assigned analysed instead the mapping between the core invoice model and ISO 20022 SEPA payment files (see section 11).

## 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*

## 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

#### **end user**

user or developer, who ultimately is intended to use EN 16931-1 or instance invoices created thereof

### 3.2

#### **UX**

user experience

### 3.3

#### **DX**

developer experience

## 4 Testing

### 4.1 General

The Standardization Request [5] states

- the standard shall be tested as to its practical application for an end user.

This specifically deals with the requirements of an end user as a stakeholder. An end-user is a person who ultimately uses or is intended to ultimately use a product, and the end user typically does not possess the technical understanding or skill of the product designers.

Further on the standardization request [5] states

- during the performance of the test, special account be taken of the respect for the criteria of practicality, user-friendliness and possible implementation costs

This requirement involves several stakeholders, among others service providers and product designers who will design products/software, implement the solution and maintain a product, but also public entities and private businesses that will generate, send/transmit, receive and process the invoice instances.

Based on the above assessments, WG6 decided to test both the semantics of EN 16931-1 and the syntax instances produced in the agreed syntax formats.

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