

Differences between NLCIUS and PEPPOL BIS v3 Invoices and Creditnotes

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1 Introduction

1.1 Document overview

This is a report on the differences between NLCIUS [1] (implemented in the UBL document format SI-UBL 2.0) and PEPPOL BIS v3 [2].

Both specifications are a core invoice usage specification (CIUS) of the European norm for electronic invoices EN-16931 [3]. This norm comprises several specifications, not all of which are relevant for this document. The relevant parts of the European norm are the semantic data model [3], the syntax binding to UBL [4], and, since both NLCIUS and PEPPOL BIS v3 are a CIUS of EN-16931, the specification on core invoice usage specifications [5].

Since both specifications are a CIUS of EN-16931, we shall describe only the differences in the additional restrictions on top of EN-16931, and only refer to rules of the European Norm when relevant.

This section describes the general context of this document.

In section 2 we will describe the differences in the cardinality of elements, as well as an analysis of those differences. In terms of cardinality, there are only a few differences, and those differences are mostly captured by specific business-level rules as well.

In section 3 we provide a full overview of all the business-level rule differences between the two specifications, as well as an analysis on where these rules have overlap or conflicts.

Finally, in section 4 we describe the most important differences in terms of converting a document from one format into the other. This will not cover every potential issue you might encounter when converting, but it should cover most of the general use-cases.

As part of this publication we have also published the spreadsheet with the data that was used in the process of writing this document, containing the relevant cardinality and rule differences [6]. This spreadsheet can also be of help for software developers that need to add NLCIUS or PEPPOL BIS to the output of their products. More information about how this document can be used can be found in section 4.

1.2 Document formats and rule sets

Most business document specifications make a distinction between two levels:

1. The semantic model and core elements of a document
2. The syntax binding to a particular representation format

The first describes the data model itself, which elements are mandatory, which elements are optional, what the elements mean, which values they can have, and how they correlate.

The second describes how to represent this in any specific format, for instance UBL, or UN/CEFACT.

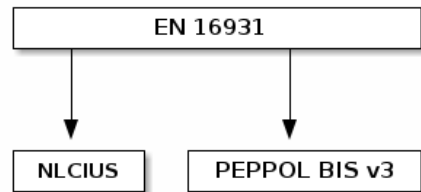
Most rules that are defined in the semantic model will have a direct equivalent in the syntax binding, but this is not always the case. The syntax binding may contain several additional elements based on the requirements itself, it may use multiple format elements to describe a single semantic element, or it may use one element to represent multiple semantic elements.

In this report, we describe the differences between the NLCIUS, and that of PEPPOL BIS v3 (Invoices and Credit Notes).

NLCIUS, as defined in [1] (Dutch), only defines the semantic model itself. The syntax binding to UBL is called SI-UBL 2.0. PEPPOL BIS v3 is both a semantic model and a syntax binding. As far as syntax bindings go, both allow representation in UBL and in UN/CEFACT, but we will only consider UBL in this document. If we explicitly refer to the PEPPOL BIS v3 syntax binding, we shall refer to it as PEPPOL BIS v3 (UBL).

1.3 CIUS and the European Norm

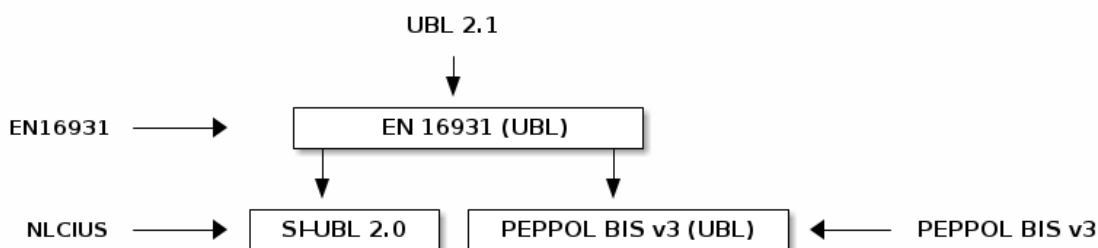
Both NLCIUS and PEPPOL BIS v3 are a CIUS of the European Norm for core invoices, EN-16931.



A Core invoice usage specification (CIUS) is a restriction on a specific implementation, for more information on how CIUS's can be defined, and what they may specify, see [5].

A CIUS in and of itself only defines the business-level rules, and optionally a set of mappings to specific formats, such as UBL or UN/CEFACT. Since UBL is the most used, we shall restrict our references to the specific mapping to UBL. In the case of NLCIUS, the UBL mapping is called SI-UBL 2.0.

When looking at the syntax binding to UBL (2.1), we get the following diagram.



1.4 Glossary of terms and notations used in this document

Business group/term ID

When listing semantic elements or groups of elements in a business document, this document regularly references a specific identifier in the semantic model. These identifiers are of the form BT-123 for business terms, or BG-456 for business groups. The specific identifiers can be found in the relevant specification (EN-16931, PEPPOL BIS v3, or NLCIUS).

Elements in UBL

When referencing a specific element in a UBL document, this document uses a simplified XPath expression, such as `/Invoice/cac:TaxTotal/cbc:TaxAmount`, pointing to any element `cbc:TaxAmount` where its parent element is an element `cac:TaxTotal` in an Invoice document.

Rules

Whenever the word 'rule' is used in this document, it explicitly refers to business rules as defined in a specification such as EN-16931, NLCIUS or PEPPOL BIS.

Rule identifiers

Business rules are of the form BR-NL-1, BR-S-08, or PEPPOL-EN16931-R006. They always start with either BR,

PEPPOL or an ISO3166-alpha2 country code, followed by a topic or subsection abbreviation, followed by a number. The specific conventions differ per specification.

Country-specific rules

When this document mentions country-specific rules, it explicitly means rules where the textual description refers to *supplier* in a specific country. Rules that are specific to a country, but not limited to documents with a supplier from that country, are *not* considered country-specific rules in the context of this document.

Consider the following four rules:

Rule	Description
BR-NL-1	For suppliers in the Netherlands the supplier MUST provide either a KVK or OIN number for its legal entity identifier
BR-NL-7	The invoice type code (cbc:InvoiceTypeCode) MUST have one of the following values: 380, 381, 384, 389
PEPPOL-EN16931-R006	Only one invoiced object is allowed on document level
DK-R-006	For Danish suppliers bank account and registration account is mandatory if payment means is 31 or 42

The first and fourth rule in this list (BR-NL-1 and DK-R-006) are considered country-specific rules. The second and third rules in this list (BR-NL-7 and PEPPOL-EN16931) are considered general rules.

2 Cardinality differences between SI-UBL and PEPPOL BIS v3 (UBL)

Differences in cardinality between PEPPOL BIS v3 (Spring 2020 release) and SI-UBL 2.0.3.

2.1 Overview

Type of difference	Number of elements
Mandatory in PEPPOL BIS v3, optional in SI-UBL 2.0	4
Optional in PEPPOL BIS v3, undefined in SI-UBL 2.0	1
Not allowed in PEPPOL BIS v3, optional in SI-UBL 2.0	1
Total number of cardinality differences	6

2.2 Specific differences

The following table contains a list of all the elements where the cardinality is different. In the next section we will discuss these elements in detail.

Element ID	Element UBL Path	SI-UBL	PEPPOL BIS
BT-23	/Invoice/cbc:ProfileID	0..1	1..1
BT-21	/Invoice/cbc:Note (with subject code)	0..1	0..0
-	/Invoice/cac:AdditionalDocumentReference/cbc:DocumentTypeCode	-	0..1
BT-34	/Invoice/cac:AccountingSupplierParty/cac:Party/cbc:EndpointID	0..1	1..1
BT-49	/Invoice/cac:AccountingCustomerParty/cac:Party/cbc:EndpointID	0..1	1..1
BT-61	/Invoice/cac:PayeeParty/cac:PartyLegalEntity/cbc:CompanyID	0..1	1..1

2.3 Analysis

BT-23 (/Invoice/cbc:ProfileID)

This element is mandatory in PEPPOL BIS v3, and optional in SI-UBL 2.0.

The NLCIUS [1] states that this element is advised against unless the transmission community requires a value here.

It is not strictly required, but can be used in a transport scenario; the three elements cbc:UBLVersionID, cbc:CustomizationID and cbc:ProfileID make up the final document type that is used in the PEPPOL lookup process. This information could be supplied from an external source but including these values in the document itself does make the document self-contained regarding transport information.

In practice, it was therefore already recommended that the ProfileID is used in SI-UBL 2.0 documents.

Note that in PEPPOL BIS v3, cbc:UBLVersionID is currently undefined, but it will be added in the future.

BT-21 (/Invoice/cbc:Note (with subject code))

This element, a cbc:Note with a specific defined format, was explicitly removed in PEPPOL BIS v3. It is also advised against in NLCIUS, so removing this particular definition should have little to no effect. The cbc:Note element itself can still be used.

/Invoice/cac:AdditionalDocumentReference/cbc:DocumentTypeCode

This element is not explicitly defined in EN-16931 as a separate business term, but it is referenced in a different

one. The element is used to distinguish referenced invoice objects (BT-18) from other additional documents (BG-24). In the case of BT-18, this element should be present and have the value 130. In the case of BG-24, the element should not be present. See EN16931-3-2 [4] page 12.

NLCIUS has copied this part of the specification, and left out its explicit definition as well, whereas PEPPOL BIS did include it explicitly.

So, in effect this is not an actual difference between the specifications. The element can be used in both PEPPOL BIS v3 and NLCIUS documents.

BT-34 (/Invoice/cac:AccountingSupplierParty/cac:Party/cbc:EndpointID)

This element is mandatory in PEPPOL BIS v3, but optional in SI-UBL 2.0.

This is the actual identifier where the sender's access point can be found on the network. PEPPOL has made this element mandatory so that another potentially important piece of transport information is included in the document itself. An important reason to include this field is that it may differ from the legal or informational senders information and has a wider range of potential identifier schemes.

Another reason to make this element mandatory is that it could be used for message-level responses; if the transport envelope information is no longer available, the value of this element can be used as the recipient of the response message.

BT-49 (/Invoice/cac:AccountingCustomerParty/cac:Party/cbc:EndpointID)

See BT-34 above, but for the receiving party.

BT-61 (/Invoice/cac:PayeeParty/cac:PartyLegalEntity/cbc:CompanyID)

Mandatory in PEPPOL BIS v3, optional in SI-UBL 2.0.

This element is listed as optional in SI-UBL 2.0, however, due to a business rule that requires the Payee scheme to be NL:KVK or NL:OINO, this element is de-facto mandatory if there is a parent element cac:PayeeParty.

3 Rule differences between NLCIUS and PEPPOL BIS v3

3.1 Overview

Both PEPPOL BIS v3 and NLCIUS define additional restrictions on EN-16931; they are CIUSes after all.

The additional rules for PEPPOL BIS v3 contain general restrictions, and country-specific restrictions. These country-specific restrictions are always based on the country of the supplier party, and are currently defined for suppliers from Denmark, Italy, Norway, and Sweden.

Country	Warnings	Errors
All	1	48
Denmark	1	13
Italy	0	4
Norway	1	1
Sweden	7	4
Total	10	70

NLCIUS also defines both general restrictions and restrictions specifically for suppliers in the Netherlands. The rules can also be split up into non-fatal warnings and fatal errors.

Supplier Country	Warnings	Errors
All	15	0
Netherlands	3	8
Total	18	8

Any UBL version of a CIUS adds, by definition, one additional rule: the value of the CustomizationID specifies which specification the document conforms to; this value is of course different for PEPPOL BIS v3 and SI-UBL 2.0. For some CIUS specifications, this is not explicitly stated as a validatable rule, as the assumption is that this field itself defines to which CIUS the document is compliant or conformant. In the case of both SI-UBL and PEPPOL BIS v3, there is an explicit rule to check the value of the CustomizationID.

The accompanying document NLCIUS-PEPPOLBIS-differences.xlsx [6] contains full lists of the rules, including the UBL Xpath context and tests, as taken from the validation rules. Note that some rules are mentioned multiple times; this is usually the case when there are multiple element paths in the syntax binding to check for different instances of the same rule; for example, a requirement for all addresses in a document could result in a specific syntax binding rule for every location in the document where an address occurs. In these cases, the rule name is extended with another hyphen followed by the number of the instance.

3.2 List of additional rules in NLCIUS / SI-UBL 2.0 (general)

Rule	Description	Severity
BR-NL-7	The invoice type code (cbc:InvoiceTypeCode) MUST have one of the following values: 380, 381, 384, 389	fatal
BR-NL-8	If the invoice type code (cbc:InvoiceTypeCode) is 381, the document MUST use the CreditNote scheme. If the invoice type code (cbc:InvoiceTypeCode) is 380, 384 or 389, the document MUST use the Invoice scheme	fatal
BR-NL-13	If an order line reference (BT-132) is used, there must be an order reference on the document level (BT-13)	fatal
BR-NL-19	The use of a tax currency code (cbc:TaxCurrencyCode) is not recommended	warning
BR-NL-20	The use of a tax point date (cbc:TaxPointDate) is not recommended, and its value will be ignored	warning
BR-NL-21	The use of a tax point date code (cac:InvoicePeriod/cbc:DescriptionCode) is not recommended, and its value will be ignored	warning
BR-NL-24	The use of a preceding invoice issue date (cac:BillingReference/cac:InvoiceDocumentReference/cbc:IssueDate) is not recommended	warning
BR-NL-25	The use of a seller tax registration identifier (cac:AccountingSupplierParty/cac:Party/cac:PartyTaxScheme/cbc:CompanyID) is not recommended when the tax scheme is not VAT, since this is not applicable to suppliers in the Netherlands	warning

Rule	Description	Severity
BR-NL-26	The use of the seller additional legal information field (cac:AccountingSupplierParty/cac:Party/cac:PartyLegalEntity/cbc:CompanyLegalForm) is not recommended, since this is not applicable for suppliers in the Netherlands	warning
BR-NL-27-1	The use of the seller address line 3 (cac:AccountingSupplierParty/cac:Party/cac:PostalAddress/cac:AddressLine/cbc:Line) is not recommended	warning
BR-NL-27-2	The use of the customer address line 3 (cac:AccountingCustomerParty/cac:Party/cac:PostalAddress/cac:AddressLine/cbc:Line) is not recommended	warning
BR-NL-27-3	The use of the tax representative address line 3 (cac:TaxRepresentativePart/cac:PostalAddress/cac:AddressLine/cbc:Line) is not recommended	warning
BR-NL-27-4	The use of the delivery address line 3 (cac:Delivery/cac:DeliveryLocation/cac:Address/cac:AddressLine/cbc:Line) is not recommended	warning
BR-NL-28-1	The use of a country subdivision (cac:AccountingSupplierParty/cac:Party/cac:PostalAddress/cbc:CountrySubentity) is not recommended	warning
BR-NL-28-2	The use of a country subdivision (cac:AccountingCustomerParty/cac:Party/cac:PostalAddress/cbc:CountrySubentity) is not recommended	warning
BR-NL-28-3	The use of a country subdivision (cac:TaxRepresentativePart/cac:PostalAddress/cbc:CountrySubentity) is not recommended	warning
BR-NL-28-4	The use of a country subdivision (cac:Delivery/cac:DeliveryLocation/cac:Address/cbc:CountrySubentity) is not recommended	warning
BR-NL-29	The use of a payment means text (cac:PaymentMeans/cbc:PaymentMeansCode???) is not recommended	warning
BR-NL-30	The use of a payment account name (cac:PaymentMeans/cac:PayeeFinancialAccount/cbc:Name) is not recommended	warning
BR-NL-31	The use of a payment service provider identifier (cac:PaymentMeans/cac:PayeeFinancialAccount/cac:FinancialInstitutionBranch/cbc:ID) is not recommended for SEPA payments (cac:PaymentMeans/cbc:PaymentMeansCode = 58 or 59)	warning
BR-NL-32-1	The use of an allowance reason code (cac:AllowanceCharge/cbc:AllowanceChargeReasonCode) is not recommended	warning
BR-NL-32-2	The use of an allowance reason code (cac:InvoiceLine/cac:AllowanceCharge/cbc:AllowanceChargeReasonCode) is not recommended	warning
BR-NL-32-3	The use of an allowance reason code (cac:CreditNoteLine/cac:AllowanceCharge/cbc:AllowanceChargeReasonCode) is not recommended	warning
BR-NL-33	The use of a tax total in accounting currency (cac:TaxTotal/cbc:TaxAmount??? different than DocumentCurrencyCode) is not recommended	warning
BR-NL-34-1	The use of a charge reason code (cac:AllowanceCharge/cbc:AllowanceChargeReasonCode) is not recommended	warning
BR-NL-34-2	The use of a charge reason code (cac:InvoiceLine/cac:AllowanceCharge/cbc:AllowanceChargeReasonCode) is not recommended	warning
BR-NL-34-3	The use of a charge reason code (cac:CreditNoteLine/cac:AllowanceCharge/cbc:AllowanceChargeReasonCode) is not recommended	warning
BR-NL-35	The use of a tax exemption reason code (cac:TaxTotal/cac:TaxSubtotal/cac:TaxCategory/cbc:TaxExemptionReasonCode) is not recommended	warning

3.3 List of additional rules in NLCIUS / SI-UBL 2.0 (country-specific)

Rule	Description	Severity
BR-NL-1	For suppliers in the Netherlands the supplier MUST provide either a KVK or OIN number for its legal entity identifier (cac:AccountingSupplierParty/cac:Party/cac:PartyLegalEntity/cbc:CompanyID with schemeID 0106 or 0190)	fatal
BR-NL-2	For suppliers in the Netherlands, the invoice MUST contain either the buyer reference (cbc:BuyerReference) or the order reference (cac:OrderReference/cbc:ID)	fatal
BR-NL-3	For suppliers in the Netherlands the supplier's address (cac:AccountingSupplierParty/cac:Party/cac:PostalAddress) MUST contain street name (cbc:StreetName), city (cbc:CityName) and postal zone (cbc:PostalZone)	fatal
BR-NL-4	For suppliers in the Netherlands, if the customer is in the Netherlands, the customer address (cac:AccountingCustomerParty/cac:Party/cac:PostalAddress) MUST contain the street name (cbc:StreetName), the city (cbc:CityName) and the postal zone (cbc:PostalZone)	fatal
BR-NL-5	For suppliers in the Netherlands, if the fiscal representative is in the Netherlands, the representative's address (cac:TaxRepresentativeParty/cac:PostalAddress) MUST contain street name (cbc:StreetName), city (cbc:CityName) and postal zone (cbc:PostalZone)	fatal
BR-NL-9	For suppliers in the Netherlands, if the document is a corrective invoice (cbc:InvoiceTypeCode = 384), the document MUST contain an invoice reference (cac:BillingReference/cac:InvoiceDocumentReference/cbc:ID)	fatal
BR-NL-10	For suppliers in the Netherlands, if the customer is in the Netherlands, the customer's legal entity identifier (cac:AccountingCustomerParty/cac:Party/cac:PartyLegalEntity/cbc:CompanyID) MUST be either a KVK (schemeID=0106) or OIN number (schemeID=0190)	fatal

Rule	Description	Severity
BR-NL-12	For suppliers in the Netherlands, the payment means code (cac:PaymentMeans/cbc:PaymentMeansCode) MUST be one of 30, 48, 49, 57, 58 or 59	fatal

3.4 List of additional rules in PEPOL BIS v3 (general)

Rule	Description	Severity
PEPPOL-COMMON-R040	GLN must have a valid format according to GS1 rules.	warning
PEPPOL-COMMON-R041	Norwegian organization number MUST be stated in the correct format.	fatal
PEPPOL-COMMON-R042	Danish organization number (CVR) MUST be stated in the correct format.	fatal
PEPPOL-EN16931-CL001	Mime code must be according to subset of IANA code list.	fatal
PEPPOL-EN16931-CL002	Reason code MUST be according to subset of UNCL 5189 D.16B.	fatal
PEPPOL-EN16931-CL003	Reason code MUST be according to UNCL 7161 D.16B.	fatal
PEPPOL-EN16931-CL006	Invoice period description code must be according to UNCL 2005 D.16B.	fatal
PEPPOL-EN16931-CL007	Currency code must be according to ISO 4217:2005	fatal
PEPPOL-EN16931-CL008	Electronic address identifier scheme must be from the code list "Electronic Address Identifier Scheme"	fatal
PEPPOL-EN16931-F001	A date MUST be formatted YYYY-MM-DD.	fatal
PEPPOL-EN16931-P0100	Invoice type code MUST be set according to the profile.	fatal
PEPPOL-EN16931-P0101	Credit note type code MUST be set according to the profile.	fatal
PEPPOL-EN16931-P0104	Tax Category G MUST be used when exemption reason code is VATEX-EU-G	fatal
PEPPOL-EN16931-P0105	Tax Category O MUST be used when exemption reason code is VATEX-EU-O	fatal
PEPPOL-EN16931-P0106	Tax Category K MUST be used when exemption reason code is VATEX-EU-IC	fatal
PEPPOL-EN16931-P0107	Tax Category AE MUST be used when exemption reason code is VATEX-EU-AE	fatal
PEPPOL-EN16931-P0108	Tax Category E MUST be used when exemption reason code is VATEX-EU-D	fatal
PEPPOL-EN16931-P0109	Tax Category E MUST be used when exemption reason code is VATEX-EU-F	fatal
PEPPOL-EN16931-P0110	Tax Category E MUST be used when exemption reason code is VATEX-EU-I	fatal
PEPPOL-EN16931-P0111	Tax Category E MUST be used when exemption reason code is VATEX-EU-J	fatal
PEPPOL-EN16931-R001	Business process MUST be provided.	fatal
PEPPOL-EN16931-R002	No more than one note is allowed on document level.	fatal
PEPPOL-EN16931-R003	A buyer reference or purchase order reference MUST be provided.	fatal
PEPPOL-EN16931-R004	Specification identifier MUST have the value 'urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0'.	fatal
PEPPOL-EN16931-R005	VAT accounting currency code MUST be different from invoice currency code when provided.	fatal
PEPPOL-EN16931-R006	Only one invoiced object is allowed on document level	fatal
PEPPOL-EN16931-R007	Business process MUST be in the format 'urn:fdc:peppol.eu:2017:poacc:billing:NN:1.0' where NN indicates the process number.	fatal
PEPPOL-EN16931-R008	Document MUST not contain empty elements.	fatal
PEPPOL-EN16931-R010	Buyer electronic address MUST be provided	fatal
PEPPOL-EN16931-R020	Seller electronic address MUST be provided	fatal
PEPPOL-EN16931-R040	Allowance/charge amount must equal base amount * percentage/100 if base amount and percentage exists	fatal
PEPPOL-EN16931-R041	Allowance/charge base amount MUST be provided when allowance/charge percentage is provided.	fatal
PEPPOL-EN16931-R042	Allowance/charge percentage MUST be provided when allowance/charge base amount is provided.	fatal
PEPPOL-EN16931-R043	Allowance/charge ChargeIndicator value MUST equal 'true' or 'false'	fatal
PEPPOL-EN16931-R044	Charge on price level is NOT allowed. Only value 'false' allowed.	fatal
PEPPOL-EN16931-R046	Item net price MUST equal (Gross price - Allowance amount) when gross price is provided.	fatal
PEPPOL-EN16931-R051	All currencyID attributes must have the same value as the invoice currency code (BT-5), except for the invoice total VAT amount in accounting currency (BT-111).	fatal
PEPPOL-EN16931-R053	Only one tax total with tax subtotals MUST be provided.	fatal
PEPPOL-EN16931-R054	Only one tax total without tax subtotals MUST be provided when tax currency code is provided.	fatal
PEPPOL-EN16931-R055	Invoice total VAT amount and Invoice total VAT amount in accounting currency MUST have the same operational sign	fatal
PEPPOL-EN16931-R061	Mandate reference MUST be provided for direct debit.	fatal
PEPPOL-EN16931-R080	Only one project reference is allowed on document level	fatal
PEPPOL-EN16931-R100	Only one invoiced object is allowed pr line	fatal
PEPPOL-EN16931-R101	Element Document reference can only be used for Invoice line object	fatal
PEPPOL-EN16931-R110	Start date of line period MUST be within invoice period.	fatal

Rule	Description	Severity
PEPPOL-EN16931-R111	End date of line period MUST be within invoice period.	fatal
PEPPOL-EN16931-R120	Invoice line net amount MUST equal (Invoiced quantity * (Item net price/item price base quantity) + Sum of invoice line charge amount - sum of invoice line allowance amount	fatal
PEPPOL-EN16931-R121	Base quantity MUST be a positive number above zero.	fatal
PEPPOL-EN16931-R130	Unit code of price base quantity MUST be same as invoiced quantity.	fatal

3.5 List of additional rules in PEPPOL BIS v3 (country-specific)

Rule	Description	Severity
DK-R-002	Danish suppliers MUST provide legal entity (CVR-number)	fatal
DK-R-003	If ItemClassification is provided from Danish suppliers, UNSPSC version 19.0501 should be used.	warning
DK-R-004	When specifying non-VAT Taxes, Danish suppliers MUST use the AllowanceChargeReasonCode="ZZZ" and the 4-digit Tax category MUST be specified in 'AllowanceChargeReason'	fatal
DK-R-005	For Danish suppliers the following Payment means codes are allowed: 1, 10, 31, 42, 48, 49, 50, 58, 59, 93 and 97	fatal
DK-R-006	For Danish suppliers bank account and registration account is mandatory if payment means is 31 or 42	fatal
DK-R-007	For Danish suppliers PaymentMandate/ID and PayerFinancialAccount/ID are mandatory when payment means is 49	fatal
DK-R-008	For Danish Suppliers PaymentID is mandatory and MUST start with 01#, 04# or 15# (kortartkode), and PayeeFinancialAccount/ID (Giro kontonummer) is mandatory and must be 7 characters long, when payment means equals 50 (Giro)	fatal
DK-R-009	For Danish Suppliers if the PaymentID is prefixed with 04# or 15# the 16 digits instruction Id must be added to the PaymentID eg. "04#1234567890123456" when Payment means equals 50 (Giro)	fatal
DK-R-010	For Danish Suppliers the PaymentID is mandatory and MUST start with 71#, 73# or 75# (kortartkode) and PayeeFinancialAccount/ID (Kreditnummer) is mandatory and must be exactly 8 characters long, when Payment means equals 93 (FIK)	fatal
DK-R-011	For Danish Suppliers if the PaymentID is prefixed with 71# or 75# the 15-16 digits instruction Id must be added to the PaymentID eg. "71#1234567890123456" when payment Method equals 93 (FIK)	fatal
DK-R-013	For Danish Suppliers it is mandatory to use schemeID when PartyIdentification/ID is used for AccountingCustomerParty or AccountingSupplierParty	fatal
DK-R-014	For Danish Suppliers it is mandatory to specify schemeID as "0184" (DK CVR-number) when PartyLegalEntity/CompanyID is used for AccountingSupplierParty	fatal
DK-R-015	For Danish Suppliers, if specified, AccountingSupplierParty/PartyTaxScheme/CompanyID (DK VAT number) must start with DK followed by 8 digits	fatal
DK-R-016	For Danish Suppliers, a Credit note cannot have a negative total (PayableAmount)	fatal
IT-R-001	BT-32 (Seller tax registration identifier) - For Italian suppliers BT-32 minimum length 11 and maximum length shall be 16. Per i fornitori italiani il BT-32 deve avere una lunghezza tra 11 e 16 caratteri	fatal
IT-R-002	BT-35 (Seller address line 1) - Italian suppliers MUST provide the postal address line 1 - I fornitori italiani devono indicare l'indirizzo postale.	fatal
IT-R-003	BT-37 (Seller city) - Italian suppliers MUST provide the postal address city - I fornitori italiani devono indicare la città di residenza.	fatal
IT-R-004	BT-38 (Seller post code) - Italian suppliers MUST provide the postal address post code - I fornitori italiani devono indicare il CAP di residenza.	fatal
NO-R-001	For Norwegian suppliers, a VAT number MUST be the country code prefix NO followed by a valid Norwegian organization number (nine numbers) followed by the letters MVA.	fatal
NO-R-002	For Norwegian suppliers, most invoice issuers are required to append "Foretaksregisteret" to their invoice. "Dersom selger er aksjeselskap, allmennaksjeselskap eller filial av utenlandsk selskap skal også ordet «Foretaksregisteret» fremgå av salgsdokumentet, jf. foretaksregisterloven § 10-2."	warning
SE-R-001	For Swedish suppliers, Swedish VAT-numbers must consist of 14 characters.	fatal
SE-R-002	For Swedish suppliers, the Swedish VAT-numbers must have the trailing 12 characters in numeric form	fatal
SE-R-003	Swedish organisation numbers should be numeric.	warning
SE-R-004	Swedish organisation numbers consist of 10 characters.	warning
SE-R-005	For Swedish suppliers, when using Seller tax registration identifier, 'Godkänd för F-skatt' must be stated	fatal
SE-R-006	For Swedish suppliers, only standard VAT rate of 6, 12 or 25 are used	fatal
SE-R-007	For Swedish suppliers using Plusgiro, the Account ID must be numeric	warning
SE-R-008	For Swedish suppliers using Bankgiro, the Account ID must be numeric	warning
SE-R-009	For Swedish suppliers using Bankgiro, the Account ID must have 7-8 characters	warning
SE-R-010	For Swedish suppliers using Plusgiro, the Account ID must have 2-8 characters	warning
SE-R-011	For Swedish suppliers using Swedish Bankgiro or Plusgiro, the proper way to indicate this is to use Code 30 for PaymentMeans and FinancialInstitutionBranch ID with code SE:BANKGIRO or SE:PLUSGIRO	warning

3.6 Extended analysis of the rule differences

3.6.1 Country-specific rules, based on supplier country

The country-specific rules are based on the value of the country code element in the AccountingSupplier group. Because of this, only one set of rules can be active at any time, and there can be no conflicts between them.

It can occur that the additional rules will impact documents with that specific supplier country. For example, an invoice with a supplier from the Netherlands may be valid in PEPPOL BIS, but not in SI-UBL 2.0, if it does not conform to the rules from the NLCIUS. Conversely, the same can be true for valid SI-UBL documents with a supplier from Denmark, Italy, Norway, or Sweden. It can also be expected that more country-specific rules will be added in the future.

However, in general, several rules are based on laws and regulations in the country of the supplier, so invoices that are not compliant to those specific rules are not legally valid invoices. For example, in the Netherlands, the supplier's address must be provided in full due to tax laws. We do not expect there to be many cases where suppliers use a different format just so the rules of their country's most widely used format can be avoided.

That said, there are cases in the Netherlands where SI-UBL 1.2, the predecessor of SI-UBL 2.0, is still used. This specification is not conformant to EN-16931. The reason that these documents are still in active use is that there are a few invoicing scenarios that are not covered by the European Norm. The issues are being worked on, but this falls out of scope of this document.

3.6.2 Enforced rules (fatal errors) in NLCIUS

3.6.2.1 InvoiceTypeCode and CreditNoteTypeCode

Related NLCIUS rules	Related PEPPOL BIS rules
BR-NL-7	None
BR-NL-8	

Related NLCIUS rules: **BR-NL-7, BR-NL-8**

Related PEPPOL BIS rules: **PEPPOL-EN16931-P0100, PEPPOL-EN16931-P0101**

NLCIUS and PEPPOL BIS have different sets of allowed typecodes, both for invoices and credit notes.

InvoiceTypeCode	Name	NLCIUS	PEPPOL BIS v3
80	Debit note related to goods or services	no	yes
82	Metered services invoice	no	yes
84	Debit note related to financial adjustments	no	yes
380	Commercial invoice	yes	yes
384	Corrective invoice	yes	no
383	Debit note	no	yes
386	Prepayment invoice	no	yes
389	Self-billed invoice	yes	no
393	Factored invoice	no	yes
395	Consignment invoice	no	yes
575	Insurer's invoice	no	yes
623	Forwarder's invoice	no	yes
780	Freight invoice	no	yes

384 and 389 are not supported by PEPPOL BIS v3; the reason for this is described at https://docs.peppol.eu/poacc/billing/3.0/bis/#_restrictions_on_the_supported_processes.

All other document types, except for 380 and 381, are not supported by NLCIUS. In some cases, such documents could be represented as a standard commercial invoice (380), but this may depend on the actual content of the document.

CreditNoteTypeCode	Name	NLCIUS	PEPPOL BIS v3
81	Credit note related to goods or services	no	yes
83	Credit note related to financial adjustments	no	yes
381	Credit note	yes	yes
396	Factored credit note	no	yes
532	Forwarder's credit note	no	yes

Only standard credit notes are supported in NLCIUS. Additionally, these are not recommended; preference is given to use a standard Invoice (code 380) with a negative value, rather than a CreditNote (code 381).

3.6.2.2 OrderLineReference and OrderReference

Related NLCIUS rules	Related PEPPOL BIS rules
BR-NL-13	None

NLCIUS states that if there is a reference to a specific line in an order, the related Order itself must be referenced too. PEPPOL BIS v3 does not have such a requirement.

3.6.2.3 Tax currency code

Related NLCIUS rules	Related PEPPOL BIS rules
BR-NL-19	PEPPOL-EN16931-R005
	PEPPOL-EN16931-R054
	PEPPOL-EN16931-R055

NLCIUS recommends against the use of a tax currency code and leaves it at that.

PEPPOL BIS does allow its use, but adds a number of requirements to it, namely that the tax currency must then differ from the document currency, that the total VAT amount in the other currency does not specify subtotals, and that the amounts in both currencies have the same operational sign.

3.6.2.4 Value added tax point date

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-20	PEPPOL-EN16931-CL006
BR-NL-21	

Regarding the value added tax point date and the value added tax point date code, the NLCIUS recommends against using them, and states that its value will be ignored.

PEPPOL BIS v3 does allow the use of these elements but limits the list of possible values of the date code to one of 3, 35, or 432.

Note that EN-16931 itself also defines this subset as a requirement, with a fatal error if the value is different. It also contains a rule that the date and date code cannot both be used, so even in NLCIUS there were already restrictions on the actual values of these elements, should they be used.

3.6.3 NLCIUS recommendations (warnings)

3.6.3.1 Preceding invoice issue date

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-24	None

NLCIUS advises against the use of a preceding invoice issue date; the invoice reference number, which is mandatory in EN-16931, should be sufficient. PEPPOL BIS has no such check, and in fact, they use the preceding invoice issue date in their examples.

3.6.3.2 Seller tax registration identifier (non-VAT)

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-25	None

NLCIUS advises against the use of a tax registration identifier if the tax scheme is not VAT, as this is not applicable in the Netherlands.

3.6.3.3 Seller additional legal information

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-26	None

NLCIUS advises against the use of the seller additional legal information field, as this is not applicable in the Netherlands.

3.6.3.4 Address line 3

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-27	None

NLCIUS advises against the use of a third address line for any address in the document.

3.6.3.5 Country subdivision

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-28	None

NLCIUS advises against the use of a country subdivision (sub entity) field for any address in the document.

3.6.3.6 Payment means code text description

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-29	None

NLCIUS advises against the use of the textual description of a payment means; the code itself should supply enough information.

3.6.3.7 Payment financial account name

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-30	None

NLCIUS advises against the use of a payment financial account name.

3.6.3.8 Payment Financial account ID

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-31	DK-R-006
	SE-R-007
	SE-R-008
	SE-R-009
	SE-R-010

NLCIUS advises against the use of the payment service provider identifier (payment means account ID) in the case of SEPA payments.

For non-SEPA bank transfers, PEPPOL BIS contains country-specific rules that make this element mandatory; for Danish and Swedish suppliers, this field is mandatory in the case of non-SEPA bank transfers. The country-specific rules for Sweden also check whether the ID is numeric and contains the correct number of digits for BankGiro or PlusGiro accounts.

3.6.3.9 Allowance/Charge reason codes

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-32	PEPPOL-EN16931-CL002
BR-NL-34	PEPPOL-EN16931-CL003
	DK-R-004

NLCIUS advises against the use of the allowance or charge reason code. However, if the code is used, it should have the same meaning as the allowance charge description. Note that either a description or reason code are mandatory for every allowance or charge, as required in EN-16931, so this essentially makes the allowance charge reason text mandatory.

PEPPOL BIS has no such recommendation.

Note that there are code lists defined for the reason codes, in both NLCIUS and PEPPOL BIS, but these lists are the same.

For allowances, this is a subset of UNCL 5189, D.16B [7], which can be found here: https://stpe.semantic-treehouse.nl/#/Codelist/Codelist_1506927104_00774486 (PEPPOL BIS publishes the same list at <https://docs.peppol.eu/poacc/billing/3.0/codelist/UNCL5189/>) For charges, this is the full list UNCL7161 D16B [8].

Additionally, PEPPOL BIS contains a country-specific rule for Denmark. Danish suppliers must use the allowance/charge category code 'ZZZ' when specifying non-VAT taxes.

3.6.3.10 Tax total in accounting currency

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-33	None

NLCIUS recommends against using a tax total in a currency other than the document currency.

3.6.3.11 Tax exemption reason code

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-35	PEPPOL-EN16931-P0104
	PEPPOL-EN16931-P0105
	PEPPOL-EN16931-P0106
	PEPPOL-EN16931-P0107
	PEPPOL-EN16931-P0108
	PEPPOL-EN16931-P0109
	PEPPOL-EN16931-P0110
	PEPPOL-EN16931-P0111

NLCIUS advises against the use of a tax exemption reason code. This field is optional in PEPPOL BIS 3, but it may trigger related errors, as the tax category itself must match the tax exemption reason code.

Note that the validation rules for EN-16931 (and hence SI-UBL 2.0), also contain that validation. One current difference is that in PEPPOL BIS v3, this rule is too broad, and it may trigger errors on line-level tax information, which themselves should at most be a warning. This rule is fixed in SI-UBL 2.0, but not (yet) in PEPPOL BIS v3.

3.6.4 Enforced (fatal) rules in PEPPOL BIS v3

3.6.4.1 Registration identifiers

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-COMMON-R040
	PEPPOL-COMMON-R041
	PEPPOL-COMMON-R042

A number of official registration identifiers, such as GLN, Norwegian organization number, and Danish organization numbers, are checked. In the case of Norwegian or Danish organization numbers, it is a fatal error if the number is not correct. In the case of GLN (PEPPOL-COMMON-R040), it is a warning.

3.6.4.2 MIME code

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-CL001

This is not in fact an additional restriction; the list of allowed MIME codes for attachment files is the same as in EN-16931. It is checked again, meaning that using a MIME code that is now allowed results in two errors instead of 1.

The list of allowed MIME types is:

- application/pdf
- image/png
- image/jpeg
- text/csv
- application/vnd.openxmlformats-officedocument.spreadsheetml.sheet
- application/vnd.oasis.opendocument.spreadsheet

3.6.4.3 Allowance/charge reason codes

See section 3.6.3.9 for discussion on the list of allowed reason codes.

3.6.4.4 Value added tax point date (invoice period description code)

See section 3.6.2.4 for discussion on the invoice period description code, where the value added tax point date is specified.

3.6.4.5 Currency codes

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-CL007

PEPPOL has an additional check on any currency code in the document. In principle, this is the same list as the one in EN-16931 (ISO 4217 alpha3), with one difference. In the official validation artefacts for EN-16931, the currency code for the Belarusian Ruble is wrong; it is BYR, while it should be BYN. PEPPOL BIS v3 does contain the correct value BYN.

3.6.4.6 Electronic address identifier scheme

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-CL008

The electronic address is the identifier where the sender and recipient can be reached on the (PEPPOL) network.

The list, as allowed by the European Norm, contains the official ISO 6523 ICD list, the PEPPOL extension list, and a subset of UN/ECE 3155. PEPPOL BIS v3 only allows the ISO 6523 ICD list and the PEPPOL extension list. It does not allow the subset of UN/ECE 3155, such as email addresses, here.

Note that this list is more extensive than the list allowed for the legal identifiers of sender and receiver parties, which contains ONLY the official ICD list. See [EN16931], business terms BT-30 and BT-47. In NLCIUS, this is even more restricted for Dutch Suppliers and Dutch Customers, where only the codes 0106 (NL:KVK) and 0190 (NL:OIN) are allowed. See [1], business terms BT-30 and BT-47.

The original lists can be found here:

- EN-16931 EAS: [9]
- PEPPOL BIS v3: [10]

The following table shows the full list as allowed by EN-16931, NLCIUS, and PEPPOL BIS v3:

SchemeID	Name	EN-16931	NLCIUS	PEPPOL BIS v3
0002	System Information et Repertoire des Entreprise et des Etablissements: SIRENE	yes	yes	yes
0007	Organisationsnummer	yes	yes	yes

SchemeID	Name	EN-16931	NLCIUS	PEPPOL BIS v3
0009	SIRET-CODE	yes	yes	yes
0037	LY-tunnus	yes	yes	yes
0060	Data Universal Numbering System (D-U-N-S Number)	yes	yes	yes
0088	EAN Location Code	yes	yes	yes
0096	DANISH CHAMBER OF COMMERCE Scheme (EDIRA compliant)	yes	yes	yes
0097	FTI - Ediforum Italia, (EDIRA compliant)	yes	yes	yes
0106	Vereniging van Kamers van Koophandel en Fabrieken in Nederland (Association of Chambers of Commerce and Industry in the Netherlands), Scheme (EDIRA compliant)	yes	yes	yes
0130	Directorates of the European Commission	yes	yes	yes
0135	SIA Object Identifiers	yes	yes	yes
0142	SECETI Object Identifiers	yes	yes	yes
0151	Australian Business Number (ABN) Scheme	yes	yes	yes
0183	Numéro d'identification suisse des entreprises (IDE), Swiss Unique Business Identification Number (UIDB)	yes	yes	yes
0184	DIGSTORG	yes	yes	yes
0190	Organisatie Indentificatie Nummer (OIN)	yes	yes	yes
0191	Company Code (Estonia)	yes	yes	yes
0192	Organisasjonsnummer	yes	yes	yes
0193	UBL.BE Party Identifier	yes	yes	yes
0194	KOIOS Open Technical Dictionary	yes	yes	NOT SUPPORTED
0195	Singapore Nationwide E-Invoice Framework	yes	yes	yes
0196	Icelandic identifier - Íslensk kennitala	yes	yes	yes
0198	ERSTORG	yes	yes	yes
0199	Legal Entity Identifier (LEI)	yes	yes	yes
0200	Legal entity code (Lithuania)	yes	yes	yes
0201	Codice Univoco Unità Organizzativa iPA	yes	yes	yes
0202	Indirizzo di Posta Elettronica Certificata	yes	yes	yes
0203	eDelivery Network Participant identifier	yes	yes	NOT SUPPORTED
0204	Leitweg-ID	yes	yes	yes
0208	Numero d'entreprise / ondernemingsnummer / Unternehmensnummer	yes	yes	yes
9901	Danish Ministry of the Interior and Health	yes	yes	yes
9902	The Danish Commerce and Companies Agency	yes	yes	NOT SUPPORTED
9904	Danish Ministry of Taxation, Central Customs and Tax Administration	yes	yes	NOT SUPPORTED
9905	Danish VANS providers	yes	yes	NOT SUPPORTED
9906	Ufficio responsabile gestione partite IVA	yes	yes	yes
9907	TAX Authority	yes	yes	yes
9910	Hungary VAT number	yes	yes	yes
9913	Business Registers Network	yes	yes	yes
9914	Österreichische Umsatzsteuer-Identifikationsnummer	yes	yes	yes
9915	"Österreichisches Verwaltungs bzw. Organisationskennzeichen"	yes	yes	yes
9918	"SOCIETY FOR WORLDWIDE INTERBANK FINANCIAL, TELECOMMUNICATION S.W.I.F.T"	yes	yes	yes
9919	Kennziffer des Unternehmensregisters	yes	yes	yes
9920	Agencia Española de Administración Tributaria	yes	yes	yes
9922	Andorra VAT number	yes	yes	yes
9923	Albania VAT number	yes	yes	yes
9924	Bosnia and Herzegovina VAT number	yes	yes	yes
9925	Belgium VAT number	yes	yes	yes
9926	Bulgaria VAT number	yes	yes	yes
9927	Switzerland VAT number	yes	yes	yes
9928	Cyprus VAT number	yes	yes	yes
9929	Czech Republic VAT number	yes	yes	yes
9930	Germany VAT number	yes	yes	yes
9931	Estonia VAT number	yes	yes	yes
9932	United Kingdom VAT number	yes	yes	yes
9933	Greece VAT number	yes	yes	yes
9934	Croatia VAT number	yes	yes	yes
9935	Ireland VAT number	yes	yes	yes

SchemeID	Name	EN-16931	NLCIUS	PEPPOL BIS v3
9936	Liechtenstein VAT number	yes	yes	yes
9937	Lithuania VAT number	yes	yes	yes
9938	Luxemburg VAT number	yes	yes	yes
9939	Latvia VAT number	yes	yes	yes
9940	Monaco VAT number	yes	yes	yes
9941	Montenegro VAT number	yes	yes	yes
9942	Macedonia, the former Yugoslav Republic of VAT number	yes	yes	yes
9943	Malta VAT number	yes	yes	yes
9944	Netherlands VAT number	yes	yes	yes
9945	Poland VAT number	yes	yes	yes
9946	Portugal VAT number	yes	yes	yes
9947	Romania VAT number	yes	yes	yes
9948	Serbia VAT number	yes	yes	yes
9949	Slovenia VAT number	yes	yes	yes
9950	Slovakia VAT number	yes	yes	yes
9951	San Marino VAT number	yes	yes	yes
9952	Turkey VAT number	yes	yes	yes
9953	Holy See (Vatican City State) VAT number	yes	yes	yes
9955	Swedish VAT number	yes	yes	yes
9956	Belgian Crossroad Bank of Enterprises	yes	yes	yes
9957	French VAT number	yes	yes	yes
9958	German Leitweg ID	yes	yes	yes
AN	O.F.T.P. (ODETTE File Transfer Protocol)	yes	yes	NOT SUPPORTED
AQ	X.400 address for mail text	yes	yes	NOT SUPPORTED
AS	AS2 address	yes	yes	NOT SUPPORTED
AU	File Transfer Protocol	yes	yes	NOT SUPPORTED
EM	Electronic mail	yes	yes	NOT SUPPORTED

3.6.4.7 Date formats

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-F001

In XML schema, dates may contain additional time zone information (such as Z or +06:30). In PEPPOL BIS time zones are not supported in dates, and dates must be of the format 'YYYY-MM-DD'.

3.6.4.8 Invoice type code and credit note type code

See section 3.6.2.1.

3.6.4.9 Tax exemption reason codes

See [section ref:tax_exemption_reason].

3.6.4.10 Business process requirements

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R001
	PEPPOL-EN16931-R007

Apart from the cardinality difference where the business process (cbc:ProfileID) is mandatory in PEPPOL BIS, it also specifies its format, which should be of the form 'urn:fdc:peppol.eu:2017:poacc:billing:NN:1.0' where NN indicates the process number.

3.6.4.11 Document Note

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R002

In EN-16931, as well as NLCIUS, the cardinality of document-level notes is 0..n, i.e. documents can contain any

number of notes.

PEPPOL BIS defines the document-level note as optional, but only allows one note.

3.6.4.12 Order reference or buyer reference

Related NLCIUS Rules	Related PEPPOL BIS Rules
BR-NL-2	PEPPOL-EN16931-R003

The document must contain either an order reference or a buyer reference. This is also a country-specific rule for NLCIUS (BR-NL-2), so this is not a difference.

3.6.4.13 Specification Identifier

Related NLCIUS Rules	Related PEPPOL BIS Rules
SI-V20-INV-R000	PEPPOL-EN16931-R005

This is the rule that checks whether the CustomizationID element is correct. Since the CustomizationID is the element that specifies which document type is used, this rule is by definition different.

3.6.4.14 Invoiced Object Identifier

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R006

Only one invoiced object identifier (a cac:AdditionalDocumentReference with cbc:DocumentTypeCode 130) is allowed. This is also a rule in EN-16931 UBL-SR-04), so there is no difference with NLCIUS.

3.6.4.15 Empty elements

Related NLCIUS Rules	Related PEPPOL BIS Rules
SI-UBL-2	PEPPOL-EN16931-R008

Empty elements are not allowed; if a field has no value, it should be left out completely. This is not explicitly stated in NLCIUS but is a warning in SI-UBL. In PEPPOL BIS, this is a fatal error.

3.6.4.16 Electronic address of buyer and seller

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R010
	PEPPOL-EN16931-R020

In PEPPOL BIS, it is mandatory to specify the buyer's and seller's electronic address. This rule reflects the cardinality of 1..1 for these fields. In NLCIUS, these fields are optional.

3.6.4.17 Allowance and charge rules

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R040
	PEPPOL-EN16931-R041
	PEPPOL-EN16931-R042
	PEPPOL-EN16931-R043
	PEPPOL-EN16931-R044
	PEPPOL-EN16931-R046

PEPPOL BIS contains a number of extra validation checks on allowance and charge specifications:

- The cbc:ChargeIndicator field must be 'true' or 'false', other representations of the boolean value, such as 0 and 1, are not allowed
- If either of cbc:BaseAmount or cbc:MultiplierFactorNumeric are specified, they must both be present
- The value for MultiplierFactorNumeric must be a percentage; this is checked by validating that the amount of the charge or allowance equals $cbc:BaseAmount * cbc:MultiplierFactorNumeric / 100$.

- On Item prices, charges are not allowed. The only valid value for cbc:ChargeIndicator on this level is 'false'.
- If there is an item price allowance containing a base amount, the invoice line amount must equal the item base price times the item quantity, minus that allowance.

None of these rules are present in NLCIUS.

3.6.4.18 Document-level tax totals

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R053

PEPPOL BIS v3 has an explicit rule that, while multiple tax totals can be specified, only one of them may contain subtotals. NLCIUS does not have this rule.

3.6.4.19 Payment mandate for direct debit

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R061

If the payment means is direct debit (paymentmeans code 49 or 59), PEPPOL BIS documents must include a payment mandate reference (cac:PaymentMandate/cbc:ID). NLCIUS does not have this rule.

3.6.4.20 Project reference

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R080

EN-16931 specifies that there may only be one project reference in the document. This is enforced by rule UBL-SR-39.

However, there is a difference between NLCIUS and PEPPOL BIS 3 in CreditNote documents. These documents do not have the cbc:ProjectReference field, but project references can be made by using the cac:AdditionalDocumentReference group with cbc:DocumentTypeCode set to 50. In the case of PEPPOL BIS v3, it is also checked that this element occurs at most once. In the validation for EN-16931 and SI-UBL, this is not checked.

3.6.4.21 Line-level invoiced object reference

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R100
	PEPPOL-EN16931-R101

In PEPPOL BIS, when specifying an document on the line level (cac:InvoiceLine/cac:DocumentReference), the reference must be an invoiced object (with cbc:DocumentTypeCode = 130), and it may only occur once per line.

NLCIUS does not have this rule.

3.6.4.22 Invoice line period

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R110
	PEPPOL-EN16931-R111

In PEPPOL BIS, if an invoice line specifies an invoice period, the dates specified must fall between the dates specified on the document-level invoice period.

NLCIUS does not have this rule.

3.6.4.23 Invoice line amounts

Related NLCIUS Rules	Related PEPPOL BIS Rules
None	PEPPOL-EN16931-R120
	PEPPOL-EN16931-R121
	PEPPOL-EN16931-R130

PEPPOL BIS v3 contains additional check on line-level amounts:

- The line amount must equal (invoiced quantity * (item price / item price base quantity) + line-level charge - line-level allowance.
- The base quantity of an item price must be a positive number
- The unit code of the invoiced quantity and the price base quantity must be equal

Note that the addition of the line-level charge seems superfluous, as these are not allowed in PEPPOL BIS v3.

This rule is an important distinction between NLCIUS and PEPPOL BIS v3; in EN-16931 and NLCIUS, line-level checks were explicitly not added, as there are a number of use-cases where there is a disagreement about how to calculate the line amount based on the quantity and base price.

The European norm mentions this issue as well, and recommends that this value is not validated; From[3], Appendix A, section A.1.1:

Calculation within an Invoice line is not enforced in the validation to allow trade parties flexibility in rounding and multiplications of quantities and net prices.

It does, however, go on and show how the line total should be calculated, which is now implemented as a validation rule in PEPPOL BIS.

On behalf of STPE and its own members, Simplerinvoicing has requested this validation rule be removed from PEPPOL, but this request has been denied. The reason that was given was:

[PEPPOL] is respecting the EN and are already allowing the slack.

No further action.

This is totally a business level decision and can be technically implemented either way. The issue asks a previous decision of adding line level calculations in PEPPOL to be reverted.

4 Converting between NLCIUS and PEPPOL BIS v3

While the list of differences between the two specifications is rather long, it is quite likely that only a small number of changes need to be made to convert a document in one format into another. In this section we will describe a process to implement those changes.

4.1 Recommended approach

If you are currently generating PEPPOL BIS v3 documents, and need to add NLCIUS/SI-UBL 2.0 support, or vice versa, you can use this document to collect an overview of the necessary changes you will need to make in your software. However, that process is likely to miss one or more steps.

Therefore, we recommend you first read this document, then perform the following steps to update your invoice generation software, using this document as a reference for the rules mentioned in the spreadsheet.

4.1.1 Using the differences spreadsheet

With this document, we have also published an overview of all differences in the form of a spreadsheet, named *NLCIUS-PEPPOLBIS-Differences.xlsx* [6].

When adding PEPPOL BIS support if you currently only support NLCIUS/SI-UBL 2.0, you can use the sheet 'NLCIUS to PEPPOL BIS'. This sheet contains all the UBL elements used in SI-UBL 2.0, with highlighted rows for every element that is either optional in NLCIUS but mandatory in PEPPOL BIS, or has a semantic rule in PEPPOL BIS that you may need to check for compliance.

Go through this list and check all the elements that you do not generate, adding those that are mandatory in PEPPOL BIS. Then go through all the elements that you do generate, and check whether there is a PEPPOL BIS rule associated with that element. Use sec. 3.6 for reference.

When adding NLCIUS support if you currently only support PEPPOL BIS, do the same, but use the sheet 'PEPPOL BIS to NLCIUS'.

4.1.2 The experimental approach

Additionally, we recommend using the schematron validator for the document type you are adding; note that schematron validation is commonly used before sending documents on the PEPPOL network, but there are several online validators that you can use to check the compliance of your generated documents as well.

1. Update the CustomizationID value to reflect the new format (sec. 4.2.1 or sec. 4.3.1)
2. Generate a minimal document, where every value that is optional in your software is left out, and check it for compliance.
3. Update your software for any error or warning that is returned.
4. Generate a full document, where every value that your software supports is used, including using multiple values where multiple values are supported, and check this for compliance.
5. Update your software for any error or warning that is returned.
6. Repeat steps 5 and 6 for any mutually exclusive combinations of elements.

Some additional tips are given below.

4.2 Converting from NLCIUS to PEPPOL BIS v3

4.2.1 CustomizationID

The value for `/Invoice/cbc:CustomizationID` needs to be changed from

`urn:cen.eu:en16931:2017#compliant#urn:fdc:nen.nl:nlcious:v1.0`
to

4.2.2 Cardinality

In terms of cardinality, there aren't many changes to make.

There are 4 elements that are optional in NLCIUS, but mandatory in PEPPOL BIS v3. These elements should be added if they are not present yet, if the parent element exists. These elements are:

- BT-23 /Invoice/cbc:ProfileID
- BT-34 /Invoice/cac:AccountingSupplierParty/cac:Party/cbc:EndpointID
- BT-49 /Invoice/cac:AccountingCustomerParty/cac:Party/cbc:EndpointID
- BT-61 /Invoice/cac:PayeeParty/cac:PartyLegalEntity/cbc:CompanyID

There is one element that is optional in NLCIUS, but not allowed in PEPPOL BIS v3. This is the formatted /Invoice/cbc:Note option. However, since the unformatted document note is supported as an optional value, it is not necessary to make any changes should the formatted Note be used, as it will simply be interpreted as a general document-level note.

4.2.3 Other rules

For a full overview of all the minor differences, see the extended analysis of the rules differences in section 3.6.

4.3 Converting from PEPPOL BIS v3 to NLCIUS

4.3.1 CustomizationID

The value for /Invoice/cbc:CustomizationID needs to be changed from

urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0
to
urn:cen.eu:en16931:2017#compliant#urn:fdc:nen.nl:nlcious:v1.0

4.3.2 Cardinality

There is one element that is optional in PEPPOL BIS v3, but not defined in NLCIUS. This is the element /Invoice/cac:AdditionalDocumentReference/cbc:DocumentTypeCode. If this element is present in the document, it should be removed.

4.3.3 Rules

See the extended analysis of the rules differences in section 3.6.

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