



Koordinierungsstelle
für IT-Standards

«XRechnung



Freie
Hansestadt
Bremen

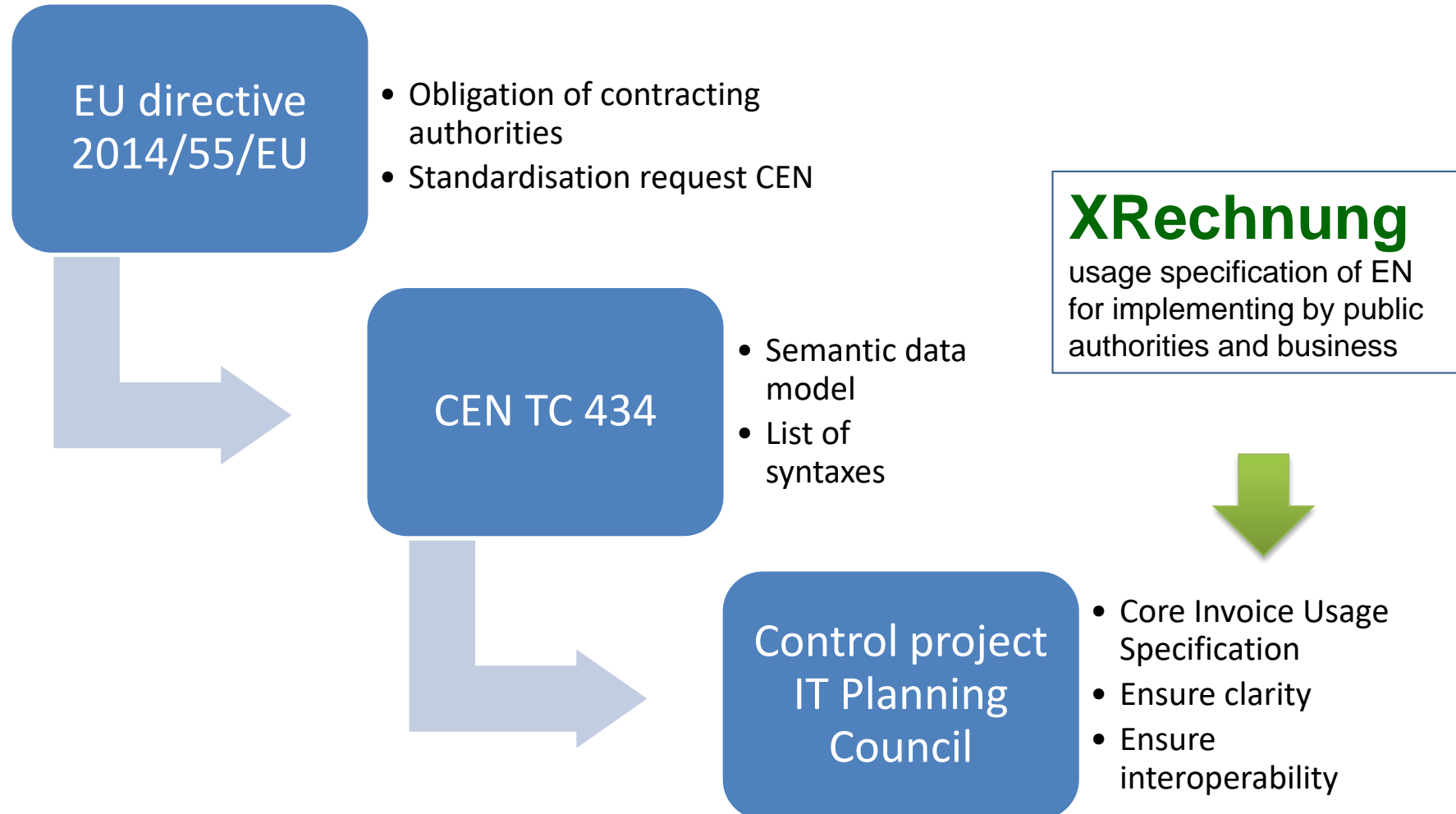
XRECHNUNG - THE CIUS FOR THE GERMAN PUBLIC SECTOR

Current status of implementation

E-Invoicing Exchange Summit 2019, Vienna

Dr. Lars Rölker-Denker – KoSIT (Koordinierungsstelle für IT-Standards)

From the European directive to the national implementation



- defines an electronic invoice as structured data set
- a mere image file should not be considered to be an electronic invoice for the purpose of the Directive
 - Defines transposition deadlines

Central contracting authorities: April 2019

Sub-central contracting authorities: April 2020

EU directive
2014/55/EU

- Obligation of contracting authorities
- Standardisation request CEN

CEN TC 434

- Semantic data model
- List of syntaxes

Control project
IT Planning
Council

XRechnung

usage specification of EN
for implementing by public
authorities and business

- Core Invoice Usage Specification
- Ensure clarity
- Ensure interoperability

From the European directive implementation

Decision IT Planning Council
2017/22 - Transposition of
Directive 2014/55/EU (electronic
invoicing - eInvoice)

EU directive
2014/55/EU

- Obligation of contracting authorities
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CEN TC 434

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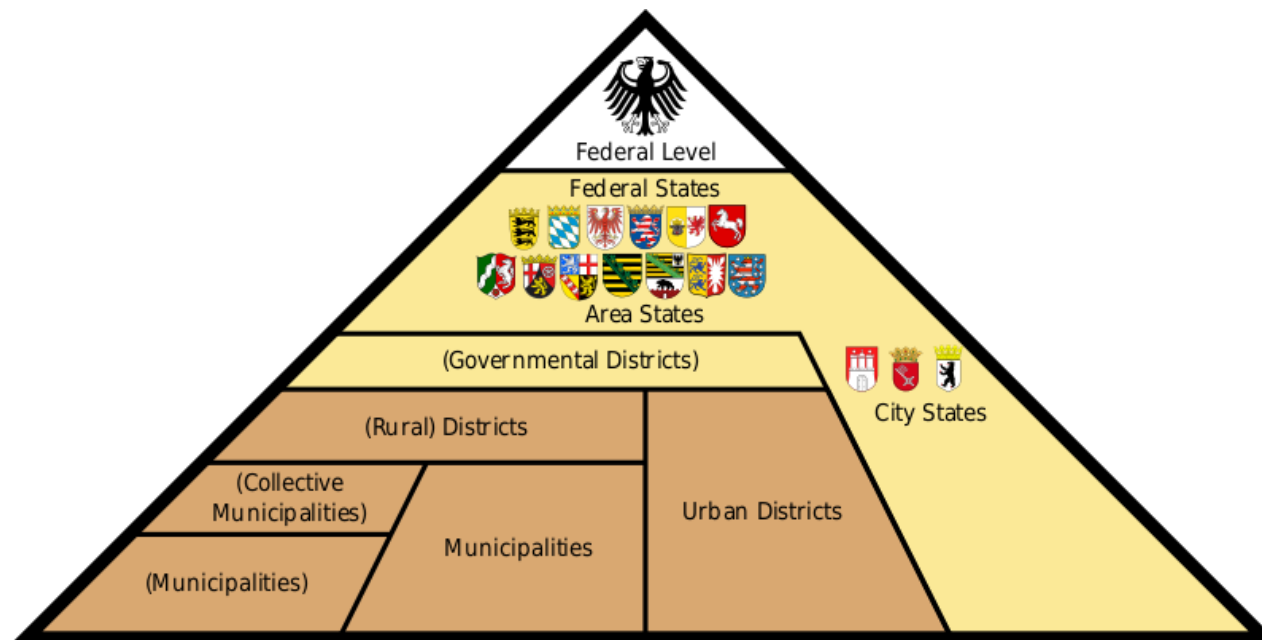
XRechnung

usage specification of EN
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- Core Invoice Usage Specification
- Ensure clarity
- Ensure interoperability

Situation in Germany

- Federal levels and responsibilities



Source: https://en.wikipedia.org/wiki/File:Administrative_divisions_of_Germany.svg

Situation in Germany

- Federal levels and responsibilities
- Central steering committee in Germany for coordinating the cooperation in terms of information technology
 - **IT Planning Council**
 - Hosted at Federal Ministry of the Interior, Building and Community (BMI)
 - Members:
 - Federal delegate (state secretary BMI)
 - State delegates
 - Delegates from local government central associations
 - Federal Commissioner for Data Protection and Freedom of Information
 - Gives standardization requests to **Coordination Office for IT Standards (KoSIT)**

Situation in Germany

- Coordination office for IT standards
 - Develops and operates standards for the public sector
 - focused on data exchange between public entities (registration services, transportation, etc.)
 - XRechnung
 - Hosts XRepository
 - Contains code lists for the standards (e.g. used in Xrechnung)
 - Hosts experts groups and steering committees
 - Contributes to national and European standardisation activities
 - Hosts XOEV conference
 - Interoperability and digitalization for the public sector

Approach by the German public sector

- Control project IT Planning Council (2016-2019)
 - **Regulatory framework** for electronic invoicing in Germany (expert group 1)
 - **Development core invoice usage specification XRechnung** (Transposition CEN standard into national specification) (expert group 2)
 - Supporting **technical artefacts** (validator, visualization, test suite) (expert group 3)
 - **Practical testing**
 - **Sustainable usage** (Development of a sustaining operational concept for the specification XRechnung)

Cooperation

- Cooperation within the public sector
 - Control project by IT Planning Council
 - Federal, state and communal level
 - Interdisciplinary skills
 - different parties in eInvoicing
 - Pilot
 - Cooperation of Bund, Bremen, North Rhine-Westphalia, Rhineland-Palatinate

Cooperation

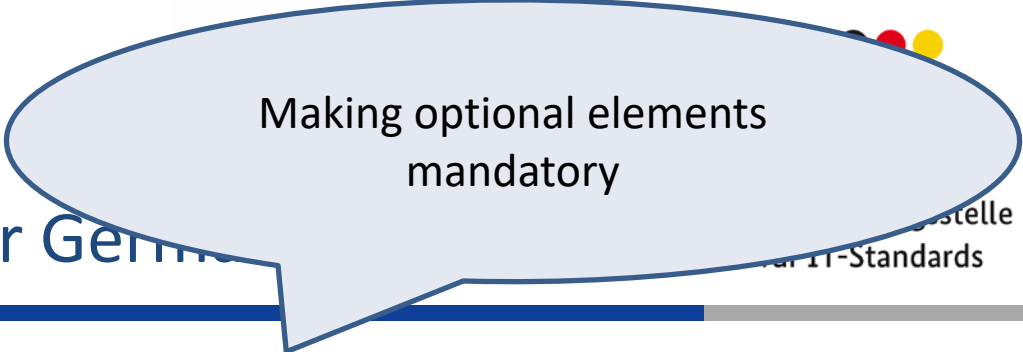
- European cooperation
 - In context of the standardisation process
 - CEN TC 434
- Cooperation with stakeholders
 - Chamber of Commerce and Chamber of Crafts
 - Service providers
 - Business game with Association for electronic Invoicing (Verband elektronische Rechnung - VeR)

Standard XRechnung

- A standard for electronic invoicing
 - But: **The** standard for electronic invoicing in the public sector -> Decision 2017/22 - Transposition of Directive 2014/55/EU (electronic invoicing – eInvoice)
 - Version **1.2.0** valid since 01.07.2019
- Version **1.2.1** was published on 30.06.2019, valid on 31.12.2019
 - Editorial changes from v1.2.0 to v1.2.1
- Defined release dates:
 - 30.06. (summer release)
 - 31.12. (winter release)
 - 6 months transition period
- **Semantic Versioning** (Major, Minor, Patch Releases)
- Release as **XBundle** containing all relevant supporting artefacts

National business rules for Germany

- BR-DE-1: For German suppliers, an invoice must contain information on “PAYMENT INSTRUCTIONS” (BG-16).
- BR-DE-2: For German suppliers, the group “SELLER CONTACT” (BG-6) must be provided.
- BR-DE-3: For German suppliers, the element “seller city” (BT-37) must be provided.
- BR-DE-4: For German suppliers, the element “Seller post code” (BT-38) must be provided.
- BR-DE-5: For German suppliers, the element “Seller contact point” (BT-41) must be provided.
- BR-DE-6: For German suppliers, the element “Seller contact telephone number” (BT-42) must be provided.
- BR-DE-7: For German suppliers, the element “Seller contact email address” (BT-43) must be provided.
- BR-DE-8: For German suppliers, the element “Buyer city” (BT-52) must be provided.



Making optional elements
mandatory

National business rules for Germany

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- BR-DE-8: For German suppliers, the element “Buyer city” (BT-52) must be provided.

National business rules for Germany

- BR-DE-9: For German suppliers, the element “Buyer post code” (BT-53) must be provided.
- BR-DE-10: For German suppliers, the element “Deliver to city” (BT-77) must be provided if the Group „DELIVER TO ADDRESS” (BG-15) is delivered.
- BR-DE-11: For German suppliers, the element „Deliver to post code” (BT-78) must be provided if the Group „DELIVER TO ADDRESS” (BG-15) is delivered.
- BR-DE-12: For German suppliers, the element “Deliver to post code” (BT-78) must contain a German postal code.
- For German suppliers, an invoice must contain information either on „CREDIT TRANSFER” (BG-17) or „PAYMENT CARD INFORMATION” (BG-18) or „DIRECT DEBIT” (BG-19).
- For German suppliers, the element “VAT category rate ” (BT-119) must be provided.



National business rules for

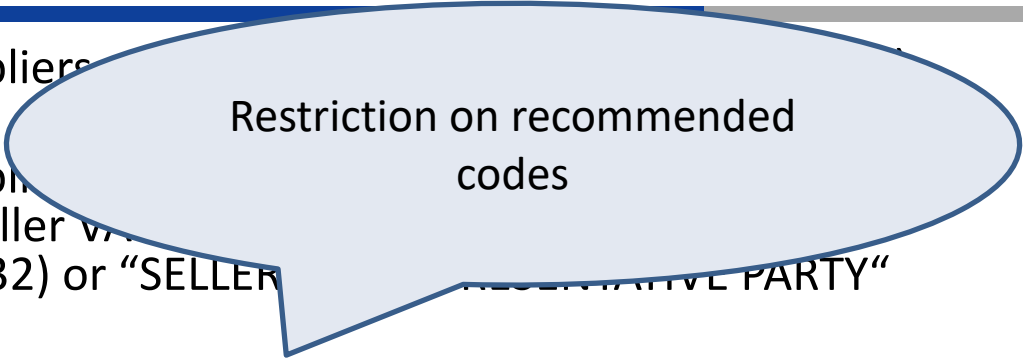
Additional constraints

- BR-DE-9: For German suppliers, the element „Deliver to city“ (BT-77) must be provided if the Group „DELIVER TO ADDRESS“ (BG-15) is delivered.
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- For German suppliers, the element „VAT category rate “ (BT-119) must be provided.

National business rules for Germany

- BR-DE-15: For German suppliers, the element “Buyer reference” (BT-10) must be provided.
- BR-DE-16: For German suppliers, an invoice must contain at least one of the following elements: “Seller VAT identifier” (BT-31) or “Seller tax registration identifier” (BT-32) or “SELLER TAX REPRESENTATIVE PARTY” (BG-11).
- BR-DE-17: For German suppliers, the element “Invoice type code” (BT-3) should only contain the following values from code list UNTDID 1001:
 - **326** (Partial invoice),
 - **380** (Commercial invoice),
 - **384** (Corrected invoice),
 - **389** (Self-billed invoice),
 - **381** (Credit note)
- BR-DE-18: For German suppliers, information on cash discount for prompt payment (Skonto) or default charges (Verzugszinsen) must be provided within the element “Payment terms” BT-20 in the following way: [...]

National business rules for Germany

- BR-DE-15: For German suppliers, the following elements must be provided.
- BR-DE-16: For German suppliers, the following elements: “Seller VAT registration identifier” (BT-32) or “SELLER TAXPAYER IDENTIFICATION NUMBER” (BT-33) must be provided. 

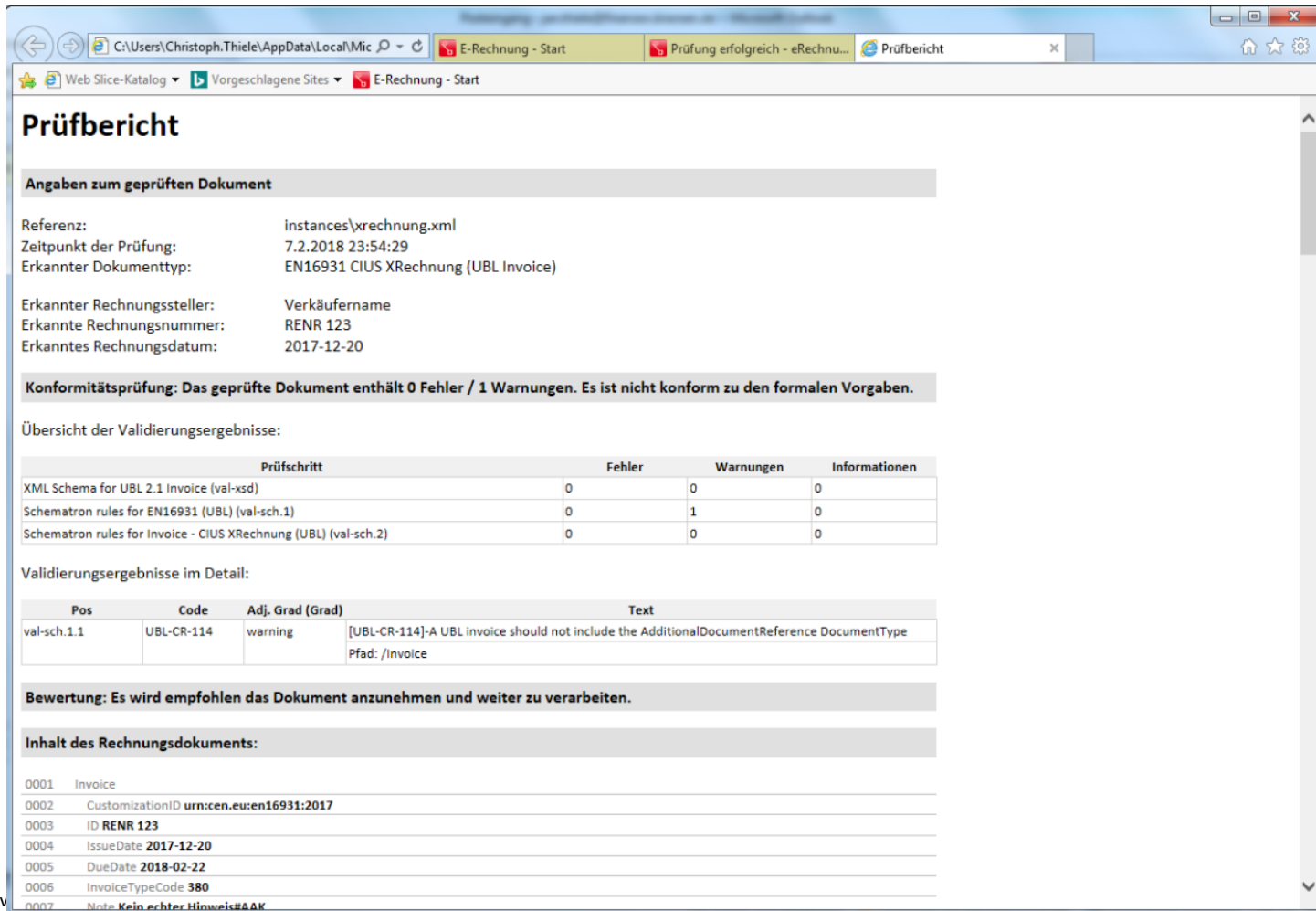
Restriction on recommended codes
- BR-DE-17: For German suppliers, the element “Invoice type code” (BT-3) should only contain the following values from code list UNTDID 1001:
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Supporting artefacts

- Validation tool: tests conformance on XRechnung
 - Published at <https://github.com/itplr-kosit>
- Visualisation of XRechnung documents
 - Published at <https://github.com/itplr-kosit>
- Reference messages in UBL and CII (test suite)
 - Published at <https://github.com/itplr-kosit>
 - Aim: Coverage of multiple (anonymized) real invoices on different levels of complexity

Supporting artefacts

- Validation tool



Prüfbericht

Angaben zum geprüften Dokument

Referenz: instances\xrechnung.xml
 Zeitpunkt der Prüfung: 7.2.2018 23:54:29
 Erkannter Dokumenttyp: EN16931 CIUS XRechnung (UBL Invoice)

Erkannter Rechnungssteller: Verkäufername
 Erkannte Rechnungsnummer: RENR 123
 Erkanntes Rechnungsdatum: 2017-12-20

Konformitätsprüfung: Das geprüfte Dokument enthält 0 Fehler / 1 Warnungen. Es ist nicht konform zu den formalen Vorgaben.

Übersicht der Validierungsergebnisse:

Prüfschritt	Fehler	Warnungen	Informationen
XML Schema for UBL 2.1 Invoice (val-xsd)	0	0	0
Schematron rules for EN16931 (UBL) (val-sch.1)	0	1	0
Schematron rules for Invoice - CIUS XRechnung (UBL) (val-sch.2)	0	0	0

Validierungsergebnisse im Detail:

Pos	Code	Adj. Grad (Grad)	Text
val-sch.1.1	UBL-CR-114	warning	[UBL-CR-114]-A UBL invoice should not include the AdditionalDocumentReference DocumentType Pfad: /Invoice

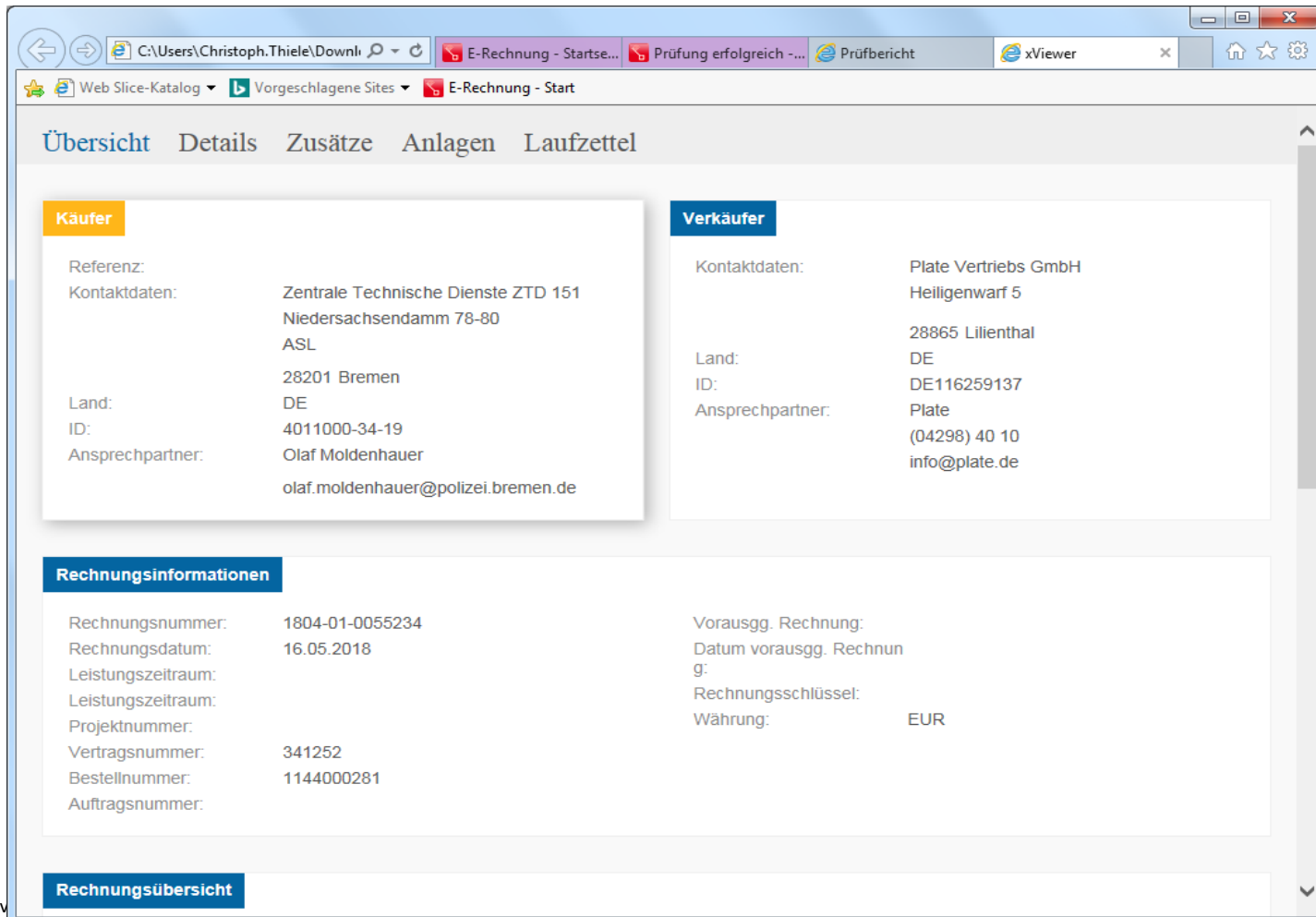
Bewertung: Es wird empfohlen das Dokument anzunehmen und weiter zu verarbeiten.

Inhalt des Rechnungsdokuments:

0001	Invoice
0002	CustomizationID urn:cen.eu:en16931:2017
0003	ID RENR 123
0004	IssueDate 2017-12-20
0005	DueDate 2018-02-22
0006	InvoiceTypeCode 380
0007	Note Kein echter Hinweis

Supporting artefacts

- Visualisation



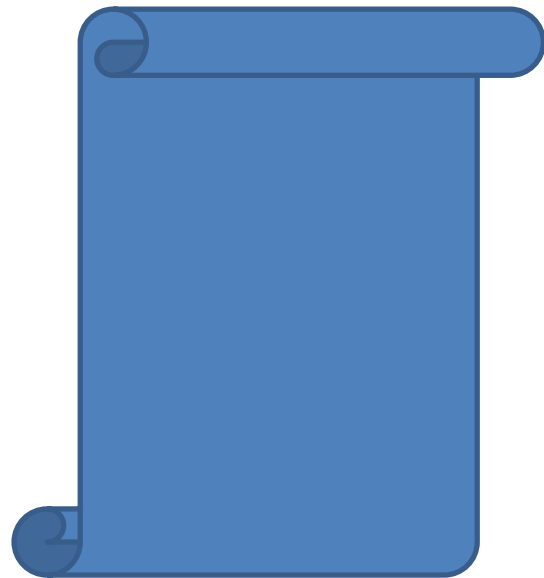
The screenshot shows a web browser window with the URL `C:\Users\Christoph.Thiele\Downl...` and several open tabs including "E-Rechnung - Startse...", "Prüfung erfolgreich - ...", "Prüfbericht", and "xViewer". The main content area displays the "Übersicht" (Overview) tab of an invoice, with sub-tabs for "Details", "Zusätze", "Anlagen", and "Laufzettel".

The invoice details are organized into three main sections:

- Käufer (Buyer):**
 - Referenz: Zentrale Technische Dienste ZTD 151
 - Kontakt Daten: Niedersachsendamm 78-80, ASL, 28201 Bremen
 - Land: DE
 - ID: 4011000-34-19
 - Ansprechpartner: Olaf Moldenhauer, `olaf.moldenhauer@polizei.bremen.de`
- Verkäufer (Seller):**
 - Kontakt Daten: Plate Vertriebs GmbH, Heiligenwarf 5, 28865 Lilienthal
 - Land: DE
 - ID: DE116259137
 - Ansprechpartner: Plate, (04298) 40 10, `info@plate.de`
- Rechnungsinformationen (Invoice Information):**
 - Rechnungsnummer: 1804-01-0055234
 - Rechnungsdatum: 16.05.2018
 - Leistungszeitraum: (blank)
 - Leistungszeitraum: (blank)
 - Projektnummer: (blank)
 - Vertragsnummer: 341252
 - Bestellnummer: 1144000281
 - Auftragsnummer: (blank)
 - Vorausgg. Rechnung: (blank)
 - Datum vorausgg. Rechnun g: (blank)
 - Rechnungsschlüssel: (blank)
 - Währung: EUR

At the bottom, there is a "Rechnungsübersicht" (Invoice Overview) section.

Factor of success



Binding agreement

Binding agreement

Decisions by the IT Planning Council

- Formalisation of the electronic invoice (format, data structure and semantics)
 - XRechnung is essential for transposition of directive 2014/55/EU
 - **Principle: XRechnung is and will be conformant to EN 16931!**
 - Main task for KoSIT as operator of XRechnung
 - XRechnung is published in Bundesanzeiger (official publication of the Federal Republic of Germany, announcing laws, mandatory legal and judicial announcements)
 - Ensured operation of the standard including transparent operational structures since 01.01.2019

Binding agreement

Decisions by the IT Planning Council

- Formalisation of transportation transmission
 - IT Planning Council confirms the need of a nationwide secure web service
 - IT Planning Council states that PEPPOL is an appropriate and available market standard in terms of § 3 IT treaty (IT-Staatsvertrag)

Binding agreement

Decisions by the IT Planning Council

- Formalisation of transportation channel
 - The IT Planning Council obligates Federal State and states, with expiration of the implementation deadline of Directive 2014/55/EU, to provide at least PEPPOL in case a web service for submission of electronic invoices is provided (Decision 2018/46)
 - PEPPOL National Authority is mandated to KoSIT (Decision 2018/12)
 - peppol@finanzen.bremen.de
- other transmission is possible (depending on legal regulation)
 - Mail, De-Mail
 - Portal, upload, form
 - Further web services (in this case, PEPPOL is mandatory as shown above)

Binding agreement

Legal regulation

- Federal level
 - Law (ERechG, decree)
- State level
 - Laws in force in most states since November 2018
 - decrees under negotiation in some states
- Current overview made available by KoSIT
 - Regular updates (4 to 6 weeks)
 - in German language
 - <https://www.xoev.de/de/xrechnung>

Level of implementation

- Federal state of Germany
 - Since 27.11.18 entry into force, obligates central contracting authorities on **receiving electronic invoices**
 - Federal portal **ZRE** available, federal portal **OZG-RE** available for joint use by federal agencies and states
 - 27.11.19: entry into force, obligates sub central contracting authorities on **receiving electronic invoices**
 - 27.11.20: Obligation to **submit electronic invoices**
- Bremen
 - Since 27.11.18 entry into force, obligates contracting authorities on **receiving electronic invoices**
 - Portal **zERIKA** is available
 - 27.11.20: Obligation to **submit electronic invoices**
- Submission via PEPPOL currently under development/implementation

Overview implementation status

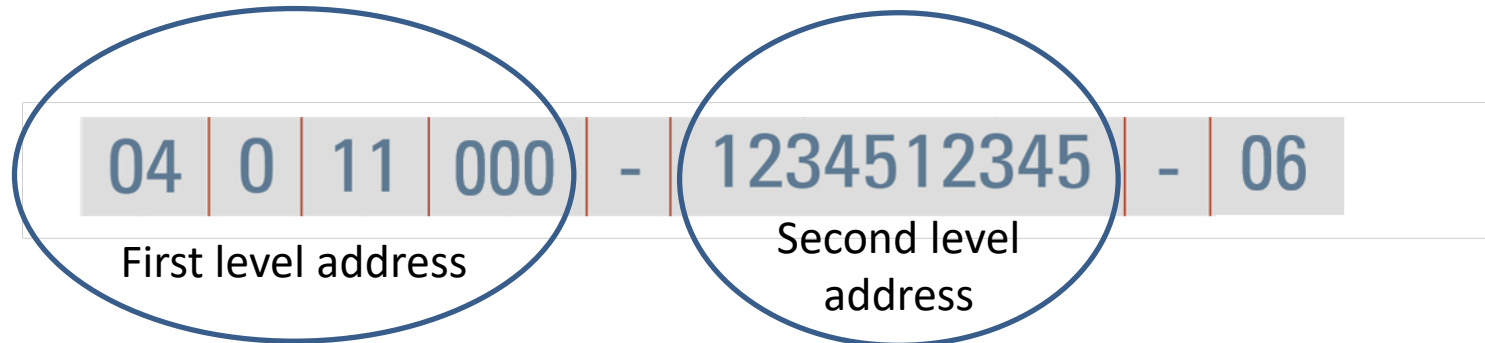
- Schleswig-Holstein
 - Since 27.11.18 entry into force, obligates contracting authorities on **receiving electronic invoices** via De-Mail
 - 27.11.19: **state portal** (currently under development)
- Thüringen
 - Since 27.11.18 entry into force, obligates contracting authorities on **receiving electronic invoices**
 - **Joint use** of federal **OZG-RE**
- Other states to follow in April 2020
 - Obligation to **receive electronic invoices**
 - Up to today all published decrees set **PEPPOL** for transmission (Bavaria awaits an evaluation period)

Current activities

- Domain specific issues
 - Energy/utility industry
 - Provision of additional information due to EnWG
 - Provision of detailed future partial payments
 - Construction industry
 - Provision of construction specific documents (national GAEB standard for on-site measurement, XML)
 - Provision of construction specific invoice types (partial construction invoice, partial final construction invoice, final construction invoice) -> CR to UNTDID:1001 by KoSIT
 - Telecommunication industry
 - Provision of external services (e.g. Mobile Payment) by third parties via phone bill, increases amount to pay after invoice total amount with VAT

Current activities

- Leitweg-ID
 - Addressing contracting authorities within BT-10
 - Scheme for addressing contracting authorities on federal, state and municipal level
 - Operational registration and maintenance is not in scope of KoSIT but within responsibility of Federal state and states
 - Version 2.0.0 published and in force
 - Also suitable as PEPPOL ID



Current topics

- Leitweg-ID
 - Addressing contracting authorities within BT-10
 - Unified addressing of contracting authorities on federal, state and
 - Up to 12 digits
 - Uniqueness down to municipal level
 - Already published by Federal Statistical Office of Germany (reuse!)

is not in scope of
state and states

04 | 0 | 11 | 000

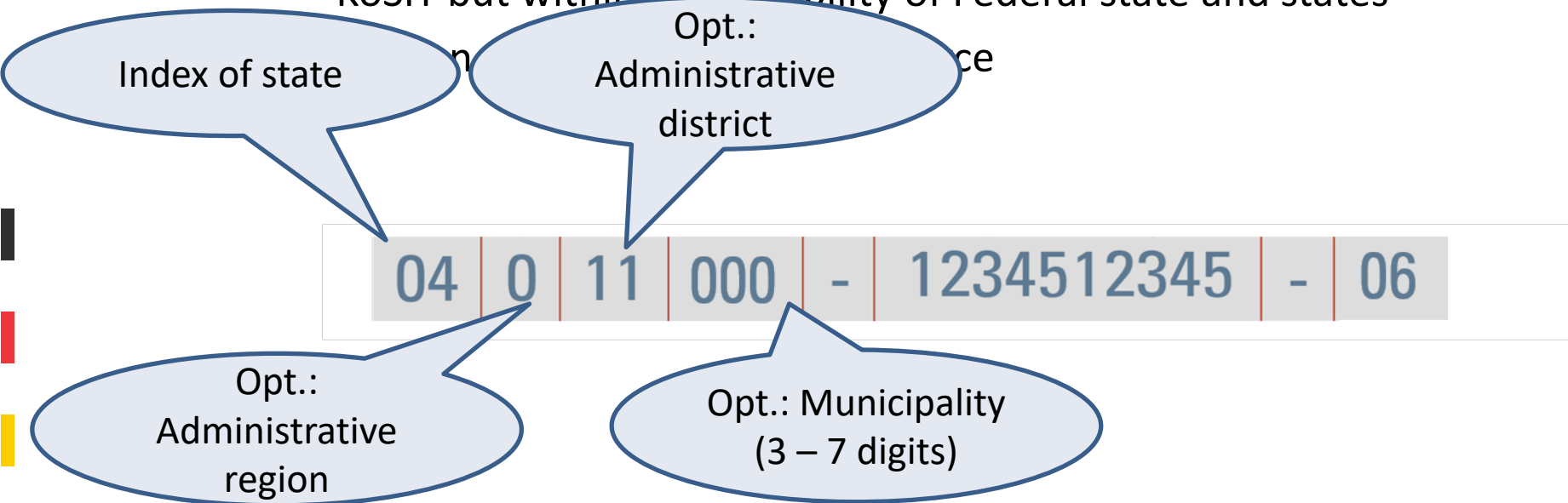
First level adress

1234512345 - 06

Second level
adress

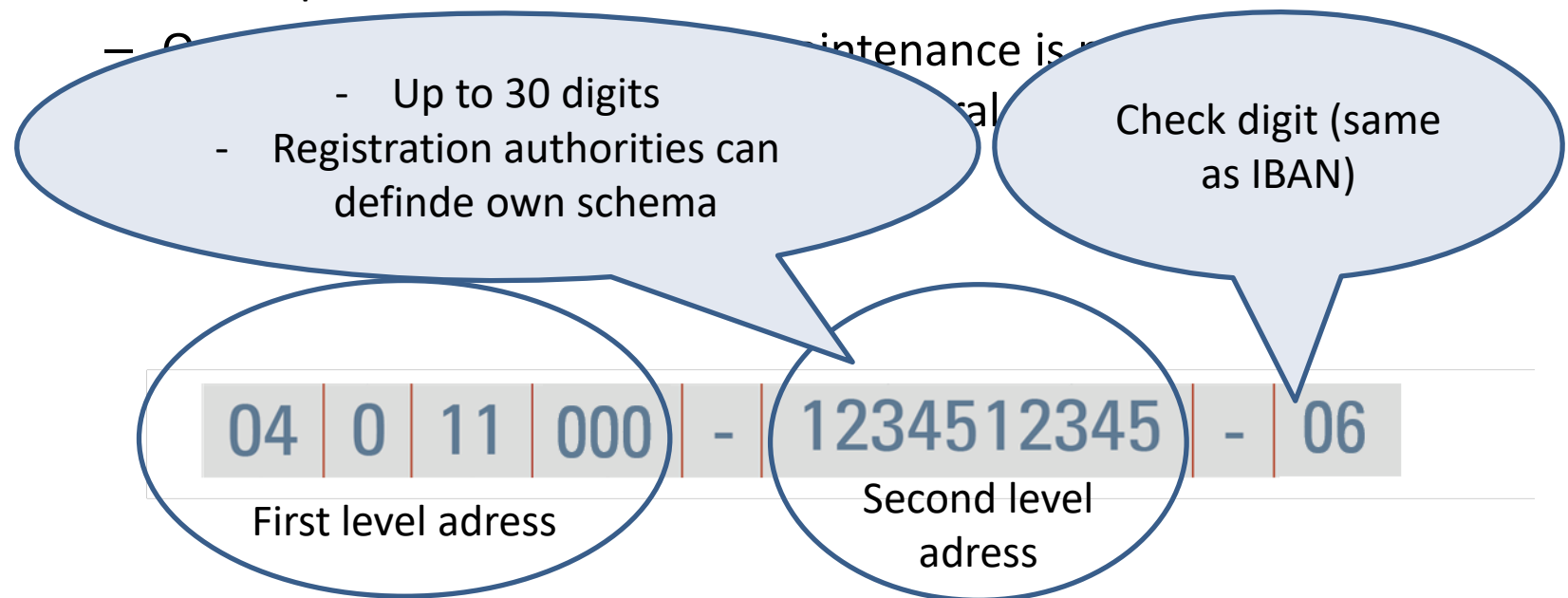
Current topics

- Leitweg-ID
 - Addressing contracting authorities within BT-10
 - Unified addressing of contracting authorities on federal, state and municipal level
 - Operational registration and maintenance is not in scope of KoSIT but within responsibility of Federal state and states



Current topics

- Leitweg-ID
 - Addressing contracting authorities within BT-10
 - Unified addressing of contracting authorities on federal, state and municipal level



Disclaimer

- Das Logo XRechnung (im Folgenden als Logo bezeichnet) ist eine eingetragene Design-Marke der Freien Hansestadt Bremen, vertreten durch den Senator für Finanzen (Designanmeldung 402019200826.1 vom 14.08.2019, veröffentlicht im Designblatt am 06.09.2019, S. 11846). Die Verwendung des Logos XRechnung ist grundsätzlich genehmigungspflichtig.
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