



EU (7) OS (4) Q&A

## Europe's Way to Mandatory B2B-E-Invoices

---

- EU
- OS
- QA

▶ Jochen Stärk

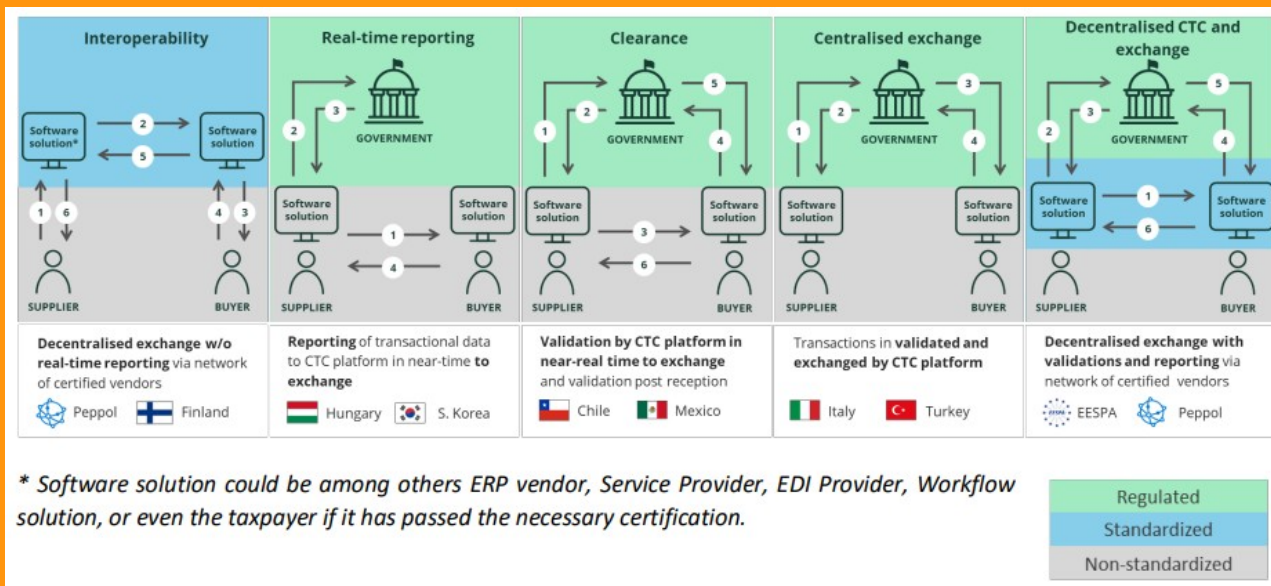
Mustangproject „Chief ZUGFeRD Amatuer“

▶ [jochen@zugferd.org](mailto:jochen@zugferd.org)



- ▶ B2G in the making (2014/55/EU, EN16931[1])
- ▶ Italy suddenly
  - We also do B2B
  - 3 corner CTC
  - FatturaPA format
  - ... and saved 3% VAT [2]
- ▶ Follows France (09/2026,09/2027[3])
  - UBL/CII/FX
  - 5 corner

- ▶ Continuous Transaction Control
- ▶ Submit (machine readable) invoices



\* Software solution could be among others ERP vendor, Service Provider, EDI Provider, Workflow solution, or even the taxpayer if it has passed the necessary certification.

- ▶ ~Sounds like a good idea
- ▶ ViDA [5] as of 2030
- ▶ EU guideline, again based on EN16931
- ▶ Follows [6]
  - Romania (01/2024)+B2C?
  - Germany (01/2025)+FX+GoBD+write
  - Belgium (01/2026)
  - Poland (02/2026)
  - ...?

# Details phases 1-2 of 3 in Germany



## E-Invoicing for B2B sales Germany domestic

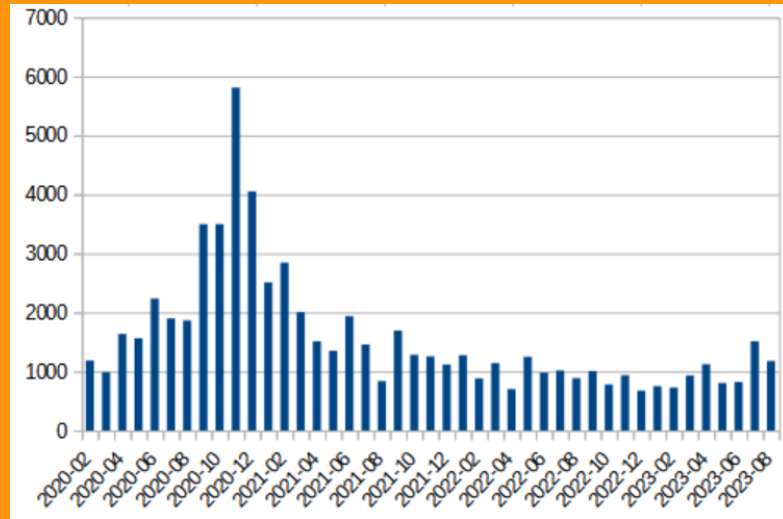
Def. VAT law	Electronic invoice > 250,00 EUR		Sonstige Rechnung					
	EN16931 compliant with CII / UBL (XRechnung, Factur-X)	Other electr. format, interoperable with EN16931 (All mandatory information according to VAT Act convertible to CII/UBL)	Papier-Rechnung	Sonstige Rechnung im elektronischen Format				
PDF				EDI-Format (EU-COM 1994) <b>wenn nicht interoperabel</b>	Anderes strukturiertes Format (iDOC, inHouse), nicht interoperabel			
until 31.12. 2024	Consent of the recipient required		Permitted	Consent of the recipient required (implied)		Consent of the recipient required		
from 1.1. 2025	Permitted: leads to <b>Obligation to receive!</b>	Bilateral agreement required	Permitted	Consent of the recipient required		Consent of the recipient required		
1.1. 2026				Consent of the recipient required		Consent of the recipient required		
1.1. 2027			Forbidden	< 800€ turnover	< 800€ turnover	Forbidden	< 800€ turnover	Forbidden
1.1. 2028			Forbidden					

Juli 2024 (c) validool.org UG

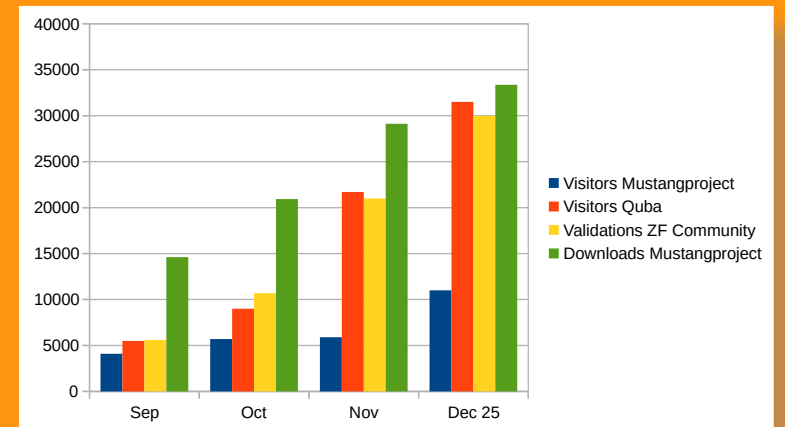
**Note:** This is not legal or tax advice. Please contact your lawyer or tax advisor for this.



▶ B2G (2020) spike (~6x)



B2B (2025) spike (~30x)





## ▶ Consequences

- „continous“ Transaction Control
- accept machine readable invoices
- Receive more automated
- Validation?!
- ID?

## ▶ Anti-discrimination requires

- Allow(mandate?) to write
- Be able to read (visualize?)
- Maybe poll for new (FR)
- Archive?



## Consequences 2: False friends

- ▶ Factur-X 1~=ZUGFeRD 2
- ▶ XRechnung: „Format“ or Cius
- ▶ Factur-X: Format or Cius
- ▶ FatturaPA: Format or Cius
- ▶ Peppol/BIS: Protocol, Format or Cius





- ▶ FOSS
- ▶ Visualization
- ▶ Validation
- ▶ Conversion
- ▶ Tools
- ▶ SDKs

The screenshot shows a web browser window with the title 'ZUGFeRD Info'. The page is titled 'Open-Source Libraries and Tools' and is part of an 'e-invoicing' section. The main content area lists various programming languages and their associated libraries for ZUGFeRD, including Python, PHP, C++, .net/ C#, and Java. A sidebar on the left contains navigation links: 'Open-Source Libraries and Tools', 'Frequently Asked Questions', 'Syllabus', 'History', and 'Imprint'. The footer of the page shows 'e-invoicing' and a version number '1.0.0'.

**ZUGFeRD Info**

e-invoicing / Open-Source Libraries and Tools

## Open-Source Libraries and Tools

[Inofficial](#) page on free Factor-X, Order-X and Deliver-X (and XRechnung) libraries and tools

[ZUGFeRD/Factor-X](#) is a standard to embed machine readable XML in electronic invoice PI

### Libraries

#### Python

- Akretion's [factur-x](#) is a BSD-licensed library

#### PHP

- @gp has a [factur-x library for PHP](#)
- horstoeko has MIT licensed PHP projects for [ZUGFeRD](#), [Order-X](#) and e.g. a [Visualizer](#)

#### C++

- [Ghostscript](#), in it's core a C++ library, [can be used in a way](#) that it actually produced p  
Factur-X

#### .net/ C#

- [ZUGFeRD-csharp](#), library for .net/ C#

#### Java

e-invoicing 1.0.0



- ▶ <https://github.com/ZUGFeRD/corpus/tree/master/XML-Rechnung>
- ▶ Badly maintained
- ▶ XML-Rechnung has german B2B samples
- ▶ Notable
  - UBL credit memo
  - ... full300 samples



EU (7) OS (3/4) Q&A

## Quba live demo

---

- ▶ <https://quba-viewer.org>



EU (7) OS (4/4) Q&A

## Mustang live demo

---

- ▶ <https://mustangproject.org>



EU (7) OS (4) Q&A

## Questions?

- ▶ Lets connect
- ▶ now/today
- ▶ [jochen@zugferd.org](mailto:jochen@zugferd.org)
- ▶ Flood it until we need something sophisticated!
- ▶ [zugferd.org](https://www.zugferd.org)
- ▶ <https://groups.google.com/g/zugferd>
- ▶ <https://app.element.io/#/room/#facturx:matrix.org>
- ▶



- ▶ [1] <https://ec.europa.eu/digital-building-blocks/sites/display/DIGITAL/Obtaining+a+copy+of+the+European+standard+on+eInvoicing>
- ▶ [2] <https://news.bloombergtax.com/daily-tax-report-international/european-vat-e-invoicing-debate-will-everyone-follow-the-italian-example>
- ▶ [3] <https://kpmg.com/us/en/home/insights/2023/07/tnf-france-delay-e-invoicing-e-reporting-implementation.html>
- ▶ [4] Kollmann [https://www.pagero.com/downloads/documents/compliance/Next\\_Generation\\_Model-Decentralised\\_CTC\\_and\\_Exchange\\_v1.pdf](https://www.pagero.com/downloads/documents/compliance/Next_Generation_Model-Decentralised_CTC_and_Exchange_v1.pdf)
- ▶ [5] <https://www.consilium.europa.eu/en/press/press-releases/2024/11/05/taxation-council-agrees-on-vat-in-the-digital-age-package/>
- ▶ [6] <https://ec.europa.eu/digital-building-blocks/sites/display/DIGITAL/eInvoicing+Country+Factsheets+for+each+Member+State+and+other+countries>
- ▶ [7] Pelekies <https://zugferd.org/e-invoicing/1.0.0/faq.en.html>



## EDI contingency slide

- ▶ Protocols vs Formats
- ▶ EDI. Since ~1960,
- ▶ 1977 first international stds in DE
- ▶ EDIFACT format 1987
- ▶ Phillip OpenPeppol
- ▶ EDI != EDIFACT
- ▶ CIUS Peppol BIS!=Peppol System
- ▶ Peppol+CTCs <https://www.eespa.eu/news-events/news-item/2022/08/03/A-NEXT-GENERATION-MODEL-FOR-ELECTRONIC-TAX-REPORTING-AND-INVOICING-DCTCE-v20>
- ▶ Peppol is EDI based on UBL+AS/4
- ▶ Open standard
- ▶ not-for-profit
- ▶ Free as in speech
- ▶ Centralized
- ▶ You may have to Peppol for B2G (in LU?) (but not B2B?)