E-Invoicing / E-Billing Electronic Tax Reporting

International Market Overview & Forecast

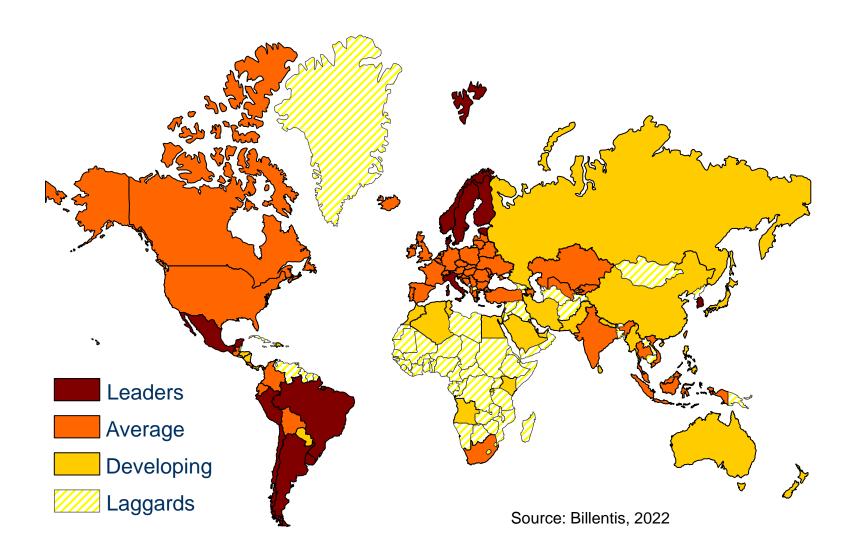


Bruno Koch February 2022

International E-Invoicing Market 2022



B2B, B2G, G2B, B2C and G2C Digitally issued by suppliers & received by buyers



COVID impact on e-invoicing volume



Overall negative impact in 2020 and 2021

- As we have some countries with broad e-invoicing mandates, it is possible to quantify the impact of a GDP change to the (e-)invoice volume
 - In 2020, the e-invoicing volume changed roughly 0.6xGDP gap (difference of 2020 GDP with average GDP growth). Therefore, Mexico had an e-invoice volume change of -6% and Italy -7.5%. Other countries with sustainable and solid organic e-invoicing growth underperformed with a 2-5% lower increase in 2020.
 - 80% of this 2020 underperformance was regained in 2021.
- Planned roll-out deadlines for e-invoicing mandates were postponed in several countries.

Overall positive impact in 2022 and years ahead

- Home-office requirements during the pandemic paved the way for accelerating the digitalisation and e-invoicing.
- The COVID-related increase in government debt is now accelerating the fight against VAT fraud by declaring e-invoicing mandatory.

Expected E-Bill/E-Invoice volume 2022 (billions) & trend radar



Recipient segment	Europe		LATAM		North America		APAC		Rest of World	
Consumer	7		16		6		15	<i>→</i>	0.5	
Business & Government	9		17		7		13	7	0.5	

Estimated electronic invoices/bills 2022 (billions, strongly rounded)

Relative growth rates 🧪

Asia & Pacific (1)



- Meanwhile mature and strongly accelerating. Most promising market regarding invoice volume, absolute and relative e-invoice growth until 2027!
- Australia: Gradual steps towards a B2G e-invoicing mandate.
 Additional measures for B2B: A 'Business elnvoicing Right' will be prepared. The Digital Economy Strategy is also supporting SMEs with \$15.3 million to enhance the value of electronic invoicing.
- China with tremendous growth of electronic consumer bills and tickets; in 2022, the B2B segment will be prepared for massive roll-out of special VAT invoice (e-fapiao) from 2023.
- In India, further roll-out step for country-wide mandatory e-invoice registration is possible and proportion of received e-invoices steadily increases.
- Israel preparing mandate for online registration of sales invoices.

Asia & Pacific (2)



- Japan in progress to roll-out a national e-invoicing framework based on Peppol standards; facilitated by E-Invoice Promotion Association (EIPA)
- Jordan preparing the field for electronic invoicing and tax reporting for goods and services in segments B2B, B2G and B2C
- The Philippines launched an e-invoicing/e-receipt program; go live as of July 2022; mandatory for the 100 largest taxpayers in the country; based on South Korean model
- Russia has high ambitions for digitization; it is regulating & standardizing the market for electronic document management services, including e-invoicing; another focus is to build a National track & trace digital system; a very strong push may be expected
- Saudi Arabia e-invoicing mandate now fully operational.
- Vietnam makes e-invoices compulsory for all enterprises from July 2022.

Latin America



- E-invoicing and electronic tax reporting pushed by public sector
- Real-time audit or invoice data mining by tax authorities with the aim of combating tax evasion
- Mandates for e-invoicing in a majority of Latin American countries
- Brazil, Mexico, and Chile as market leaders
- Bolivia, Colombia, Dominican Republic, El Salvador, Guatemala, Honduras, Panama, Paraguay and Peru push roll-out of einvoicing mandates
- Next step in invoice-related digitalization
 - Exchange of all fiscal documents just in electronic format;
 affects 20-30 messages
 - Enable the financing and speed up the cash flow of small and medium enterprises, e.g. Electronic Invoice Factoring

North America



- Payment, Trade Finance, Dynamic Discounting and Procurement as main drivers in the B2B segment
- No indications that public sector intends to become a catalyst
- Still preference for optimization of internal operations (AR and AP management), but focus on collaboration and electronic interaction between trading partners increasing
- The <u>Business Payment Coalition</u> has launched a market pilot effort to build and test a virtual network that will enable businesses of all kinds to exchange e-invoices with one another by establishing a secure, open e-invoice delivery framework between providers. The market pilot will run through year-end 2022 to establish an operational B2B invoice exchange framework for the U.S. market in 2023.

Europe (1)



- 2022 is a transitional year with average growth and a lot of preparatory work for the time after that. In 2023-2027, several larger countries will introduce nationwide B2B mandates, which will lead to a significant boost.
- 'VAT in digital age' is a new legislative package of the European Commission to adapt the way value-added tax shall be reported and collected in our increasingly digital world. In early 2022, it is in the public consultation phase.
- Latest announcements for coming B2G e-invoicing mandates
 - Latvia, 2025
 - Luxemburg, 2022
 - Cyprus, 2022

Europe (2)

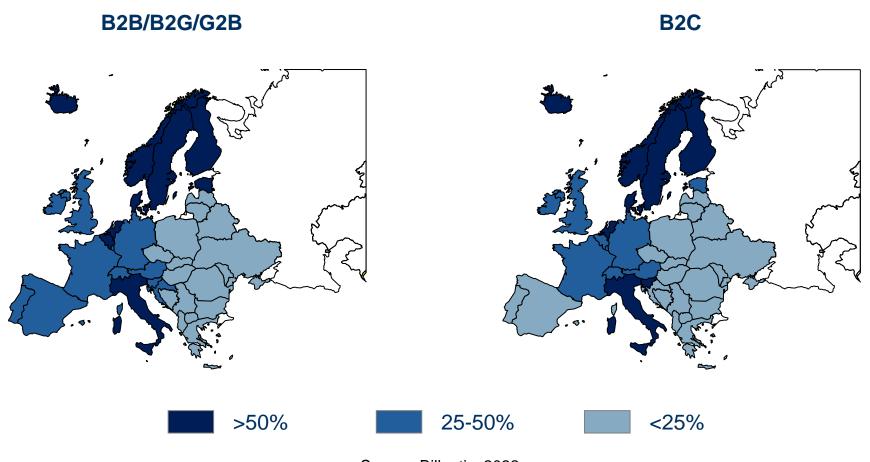


- Planned B2B e-invoicing / tax reporting mandates
 - Belgium, deadline to be fixed
 - Bulgaria, 2023 or later
 - France, 2024-2026
 - Germany, deadline to be fixed
 - Latvia, 2025
 - Poland, 2023
 - Romania, 2022
 - Serbia, 2022
 - Slovakia, 2023
 - Spain, 2023

Predicted Market Adoption 2022



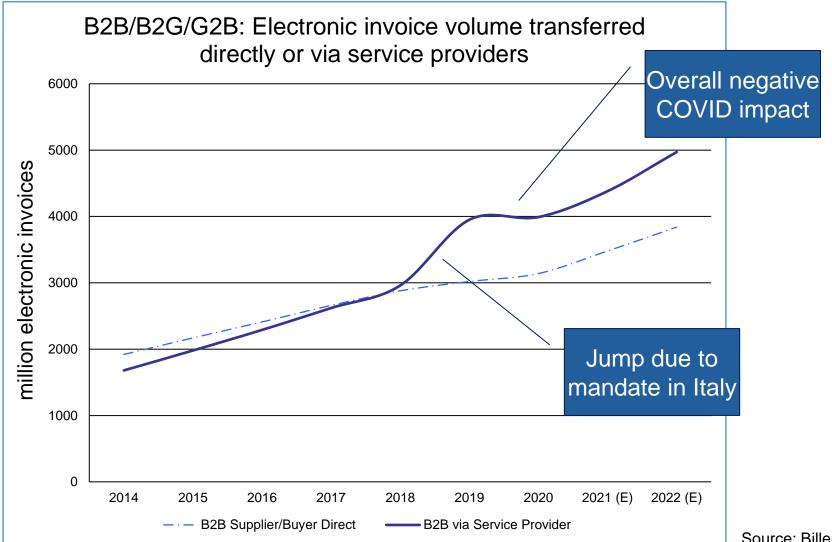
(Paperless share of total invoice/bill volume)



Source: Billentis, 2022

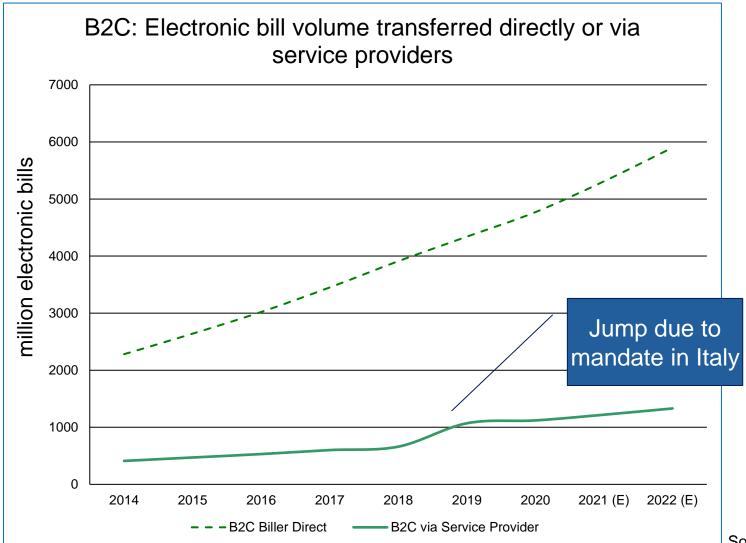
Channels used for Electronic Invoices B2B/B2G/G2B volume





Channels used for Electronic Bills B2C volume

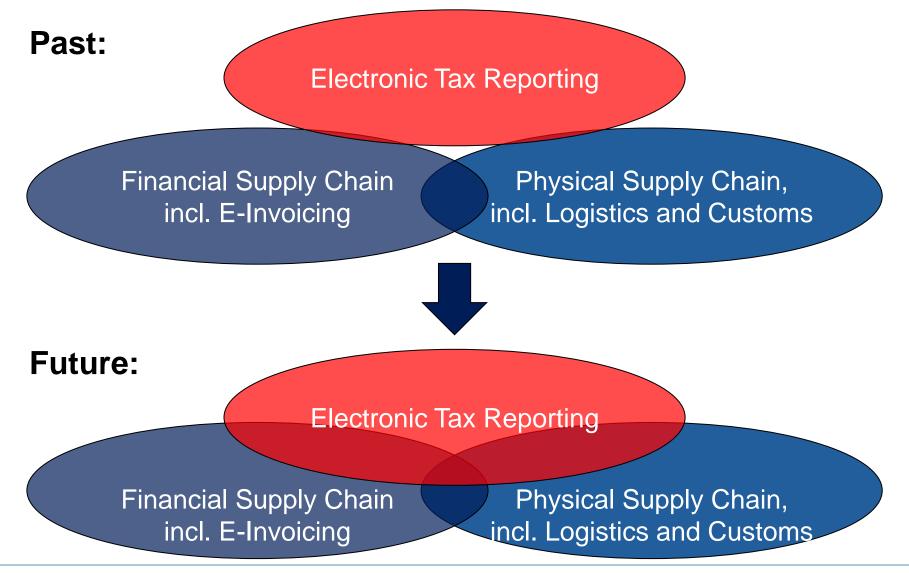




Source: Billentis, 2022

Digitalisation of Tax Reporting, Financial and Physical Supply Chain (1)





Digitalisation of Tax Reporting, Financial and Physical Supply Chain (2)



Expected long-term digitalisation scenario:



Digitalisation of Tax Reporting, Financial and Physical Supply Chain (3)



- In the past, tax reporting was often just an isolated side activity and data had to be reported periodically in an aggregated format. Present and future trends go clearly towards real-time Continuous Transaction Controls (CTC). Data of fiscally relevant documents are subject of CTC mandates. Invoices are typically the first documents that are affected by such CTC systems.
- Unfortunately until recently, CTC systems had almost only the aim to combat VAT fraud, but did not pave the way in the mass market to digitize and automate the business document processing from end-to-end.
- A new generation of systems becomes more business-friendly.

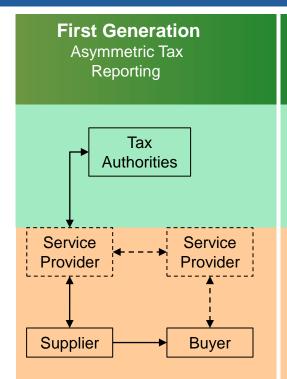
Digitalisation of Tax Reporting, Financial and Physical Supply Chain (4)



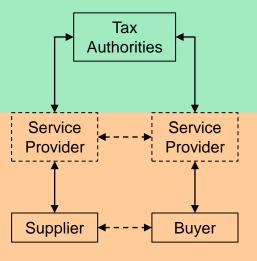
Regulated

Standard-

Standardised

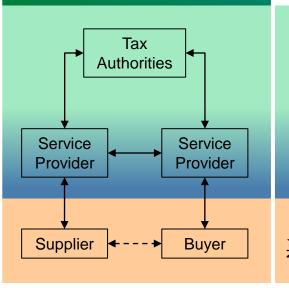


Second Generation Clearance & Centralised Exchange



Third Generation

Continuous
Transaction Controls &
Decentralised Exchange



Near-time or real-time tax reporting of fiscal documents & sales invoices extracts.

Full content Supplier-Buyer invoice exchange via decentralised private industry infrastructure.

Near-time or real-time tax reporting of fiscal documents & sales invoices or extracts.

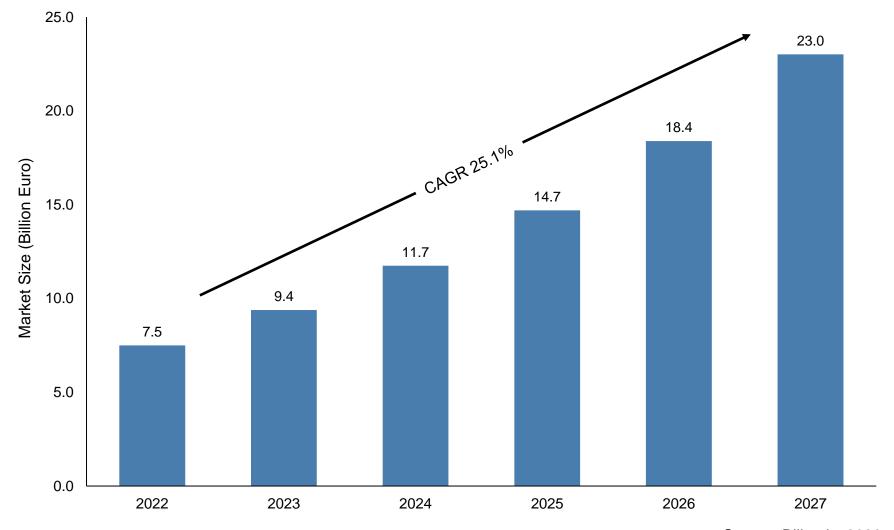
Supplier-Buyer invoice exchange in any format, paper or digital.

Near-time or real-time tax reporting of fiscal documents & sales invoices or extracts.

Supplier-Buyer invoice exchange via centralised government infrastructure.

Valuation of global e-invoicing solution, service provider & enabling market







Definitions & Methodology

Methodology



- Screening and interpreting 750+ key sources, including:
 - Official statistics in particular from countries with clearance models, knowing these figures accurately
 - Country and industry specific user surveys
 - Figures from large invoice issuers & recipients (e.g. telecom, utilities, card issuers, public sector, health services, retail industry), published online or in corporate responsibility reports
 - Figures of leading service providers
 - Consolidated figures of domestic E-Invoicing associations
- Numerous interviews with local experts
- In total, results of surveys with 20,000+ enterprises and 15,000+ consumers are considered in these statistics and forecasts

Definitions as used in my statistics



Not considered as e-invoices:

Fiscal documents not representing a commercial transaction followed by "demand for payment", e.g. bank statements, waybills

Fully digital invoices that are not tax-compliant due to lack of integrity, authenticity and legibility

'Electronic invoices' that are supported by legally relevant paper summary invoices (parts of the EDI world), scanned or printed/archived by recipients (if just the paper version is stored as the 'new' de-facto original).

'Asymmetric e-invoice', buyers can demand a printed invoice and consider it as the legal original invoice.

Major bulk of paper invoices, even if in parallel some invoice data are transmitted to the tax authorities or trading partner.

E-invoices in the broader legal sense:

'Simplified low value' e-invoices with reduced content requirements (often just 4-8 mandatory data fields) and without customer authentication

Legally can this category include invoices in a broader sense.

E-invoices in the narrow legal sense:

Only this part is included in the statistics.

E-invoices with the full content (typically 8-16 mandatory fields) and authentication of the issuer & recipient.

Two organisations in the role as supplier and buyer exchange a digital and tax-compliant invoice as the valid original invoice. They exchange them directly, via service providers and/or via the platform provided by tax authorities. These e-invoices are preserved. They are the only relevant original invoices for the tax authorities and auditors.

Paper representations can be found, but will never be considered as the legal original versions.

Why the total invoice volume might quadruple until 2035



- Today, we count about 10 times more anonymous low value invoices/tickets/receipts than full content invoices in letter/A4 format.
- Due to new legal requirements and the digitisation, a significant proportion of these receipts is gradually upgraded towards full content invoices and electronically exchanged between trading parties.

Ticket, Receipt
Customer
authentication number

4-6 mandatory fields

Ticket, Receipt
Customer
authentication number

Full content Invoice

Customer authentication number & address

8-16 mandatory fields