E-Invoicing / E-Billing

International Market Overview & Forecast

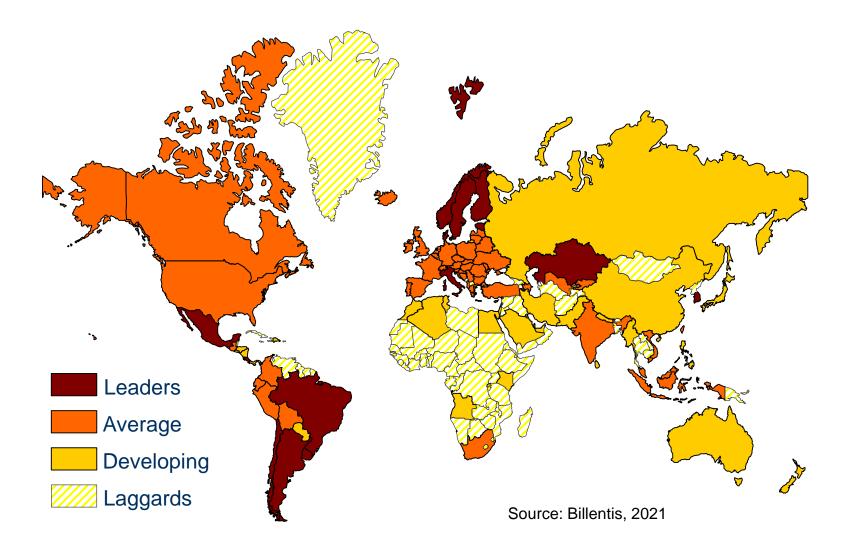


Bruno Koch February 2021

International E-Invoicing Market 2021



B2B, B2G, G2B and B2C, digitally issued/received by suppliers/buyers



COVID impact on e-invoicing volume



- Overall negative impact on countries
 - with very high adoption rate, combined with high rate of COVID infections, e.g. Mexico with -6% e-invoices, Argentina?, Italy?
 - with significant proportion of industries that were/are affected by lockdowns, e.g. hospitality, leisure, travel, etc.
 - that planned to implement next phase of mandates, but postponed,
 e.g. some in Latin America and Europe, Vietnam
- Overall positive impact on countries
 - with average to high market adoption rates, combined with soft lockdowns, e.g. Central Europe, Nordics
 - that strictly follow next rollout-steps for mandates, e.g. China, India
 - like the Philippines accelerating the planned pilot for coming einvoicing mandate

Due to its existing e-invoice volume, countries & industries with a negative impact were predominant in 2020, but the global growth 2021 is expected to be solid.

Expected E-Bill/E-Invoice volume 2021 (billions) & trend radar



Recipient segment	Europe		LATAM		North America		APAC		Rest of World	
Consumer	6		10		5	\Rightarrow	11		0.5	
Business & Government	8		14		7		7	₽	0.5	

Estimated electronic invoices/bills 2021 (billions, strongly rounded)

Relative growth rates 🥒

The applied definition for e-bills/e-invoices is described on last page of this document.

Asia & Pacific (1)



- Meanwhile mature and strongly accelerating. Most promising market regarding invoice volume, absolute and relative e-invoice growth until 2025!
- Australia: All Commonwealth Government agencies shall become 'e-invoicing ready' until July 2022, likely followed by an e-invoicing mandate for suppliers and perhaps a next step towards B2B.
- China with tremendous growth of electronic consumer bills and tickets; the B2B segment is prepared for roll-out of special VAT invoice (e-fapiao).
- In India, further roll-out step for country-wide mandatory electronic invoice registration is expected.
- Israel preparing mandate for online registration of sales invoices, related with the Chilean model.

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); specifications available from July 2021
- 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; pilot in 2021; mandate from 2022; 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 declared e-invoice mandate from November 2021.
- 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
- In 2021, Colombia, Guatemala and Peru extend e-invoicing mandate to further groups of users
- Other Latin American countries pushing roll-out respectively preparing the field for e-invoicing mandate, in particular Bolivia, Dominican Republic, El Salvador, Honduras, Panama and Paraguay
- Next step in invoice-related digitalization: exchange of all fiscal documents just in electronic format; affects 20-30 messages

North America



- Payment, Trade Finance, Dynamic Discounting and Procurement as main drivers in the B2B segment
- Still preference for optimization of internal operations (AR and AP management), but focus on collaboration and electronic interaction between trading partners increasing
- No indications that public sector intends to become a catalyst
- Federal Reserve and e-invoicing work group pushing industry efforts to develop and promote the adoption of standards that enable end-to-end electronic processing of business invoices, payments and remittance information and to build an e-invoicing interoperability framework for vendors. In Q4 2019, two PDF documents were published for <u>download</u>:
 - e-Delivery Network Feasibility Assessment Report
 - Semantic Model Assessment

Europe (1)



- Latest and coming B2G e-invoicing mandates
 - Portugal gradually rolls-out the B2G mandate with next milestones in July 2021 for SMEs and January 2022 for micro businesses.
- Planned B2B e-invoicing / tax reporting mandates
 - Albania, sales invoice registration, B2G since Jan, B2B from July and B2C from Sep 21
 - Serbia: starting from 2022, all invoices issued to legal entities and entrepreneurs shall be done in electronic form and exchanged through a single platform.
 - France announced B2B mandate with roll out 2023-2025
 - Polish National System of e-invoices (KSeF) available for voluntary usage from end 2021; high probability for B2B mandate from 2023

Europe (2)



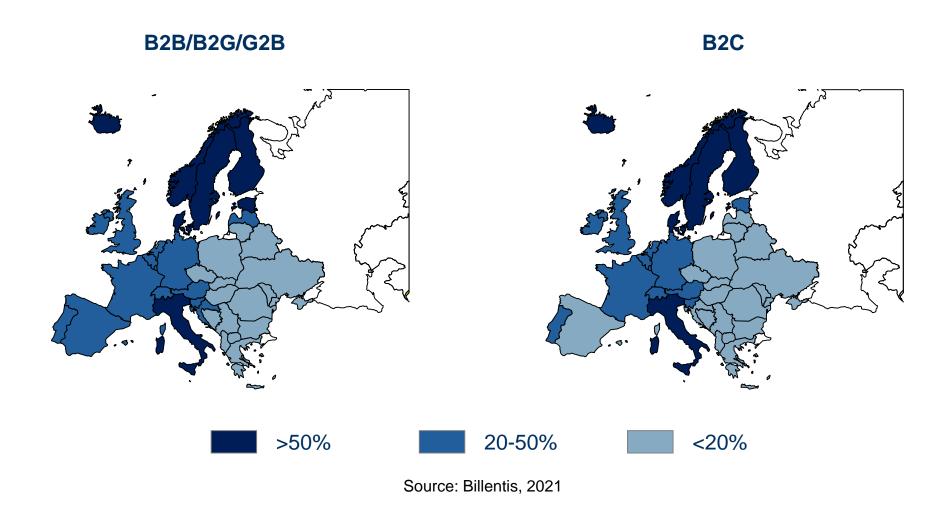
New on my radar is the EU project GAIA-X

- Development of an efficient and competitive, secure and trustworthy federation of data infrastructure and service providers for Europe.
- Is still in its childhood, but indications for pretty good support in the industry and on political level.
- Would have an impact on all B2B cloud operators and any electronic exchange of business data in case of implementation.

Predicted Market Adoption 2021

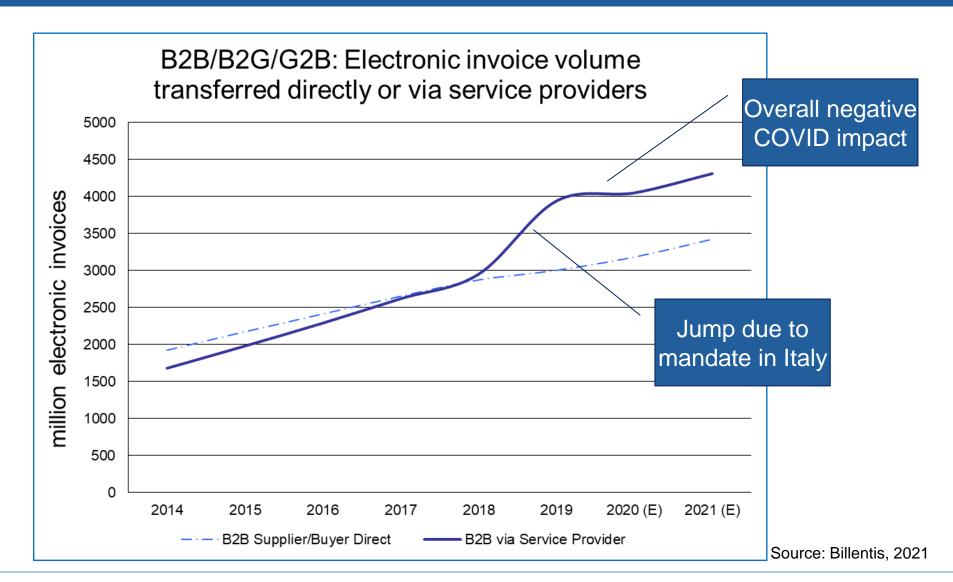


(Paperless share of total invoice/bill volume)



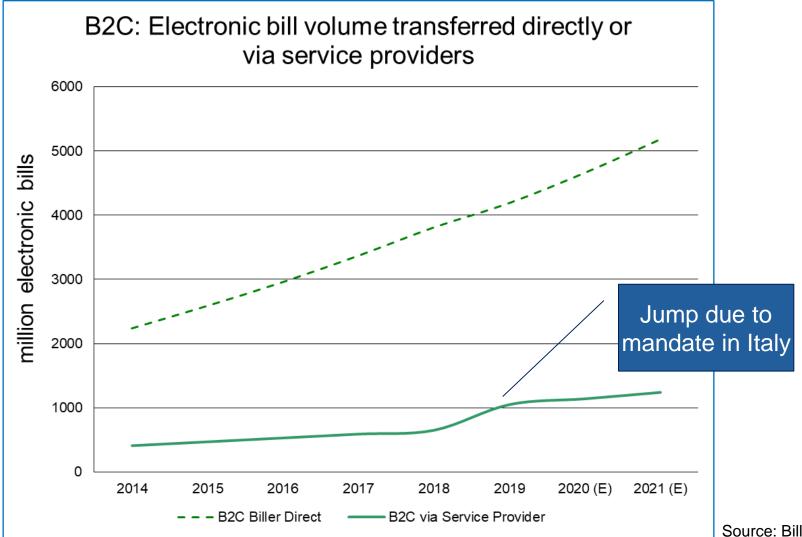
Channels Used for Electronic Invoices B2B/B2G/G2B volume





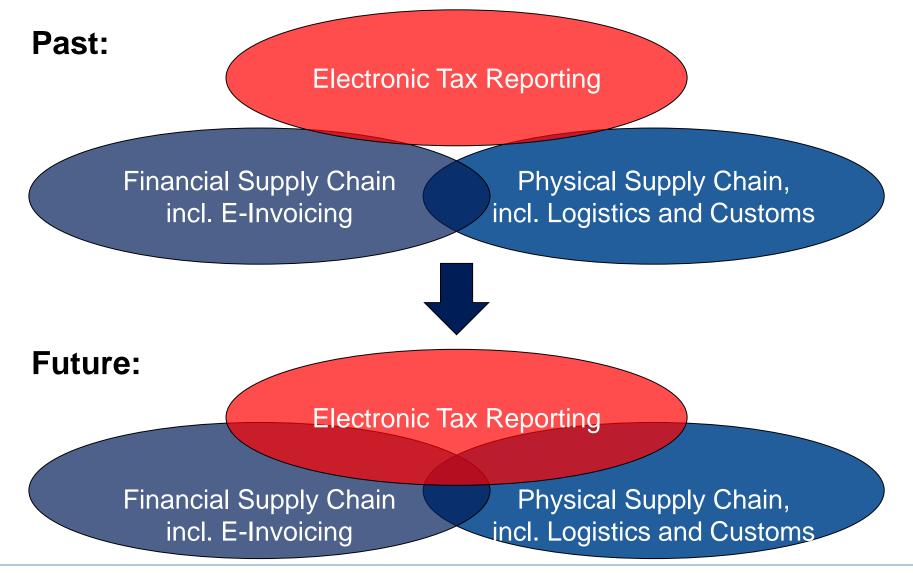
Channels Used for Electronic Bills B2C volume





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





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



- In the past, <u>Tax Reporting</u> was often just an isolated side activity.
 In the future it might become THE trigger for the digitalisation and automation. LATAM and some countries in Asia, Southern and Eastern Europe are leading the way.
- The <u>Financial Supply Chain</u> is affected first of increasing requirements by tax authorities. In advanced countries in LATAM, businesses have to electronically transmit in real-time invoices and all other tax relevant messages to the tax authorities. Some Asian and European countries require in step one just invoice extracts, but extend this in step two to full content invoices (e.g. Italy). Likely, in the future, they will also require the electronic transmission of all other tax relevant documents. The messages are also appropriate to be exchanged between businesses.
- In the <u>Physical Supply Chain</u>, goods might be tracked and traced.
 Data shall be transmitted in real-time to the tax authorities.

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



Expected long-term digitisation scenario:





Progress to internationally align interoperability cross different B2B networks and to consider requirements for tax clearance models

08.02.2021 page 17

Some international harmonisation steps for electronic invoicing & tax reporting



- Established interoperability frameworks increasingly collaborate, including e-invoicing standardisation
- Alignment between approaches of key associations like ALATIPAC, Business Payments Coalition, CIAT, ConnectONCE, EESPA, Japanese EIPA, GS1, IMDA, Peppol and Trans-Tasman e-invoicing agreement.
- ICC Expert Dialog group working on best practice for Continuous Transaction Controls
- FISCALIS and OECD Community of Interest working on SAF-T for electronic tax reporting
- Geographic Expansion
 - Former European approaches are expanding internationally, ANZ,
 Japan, Singapore, the US
- Functional Extensions
 - Besides the former B2B transmission, future support of clearance models with message exchange to/from tax authorities
 - Support of additional data, messages and tax systems (VAT + GST)



Definitions & Methodology

08.02.2021 page 19

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.