

E-Invoicing / E-Billing

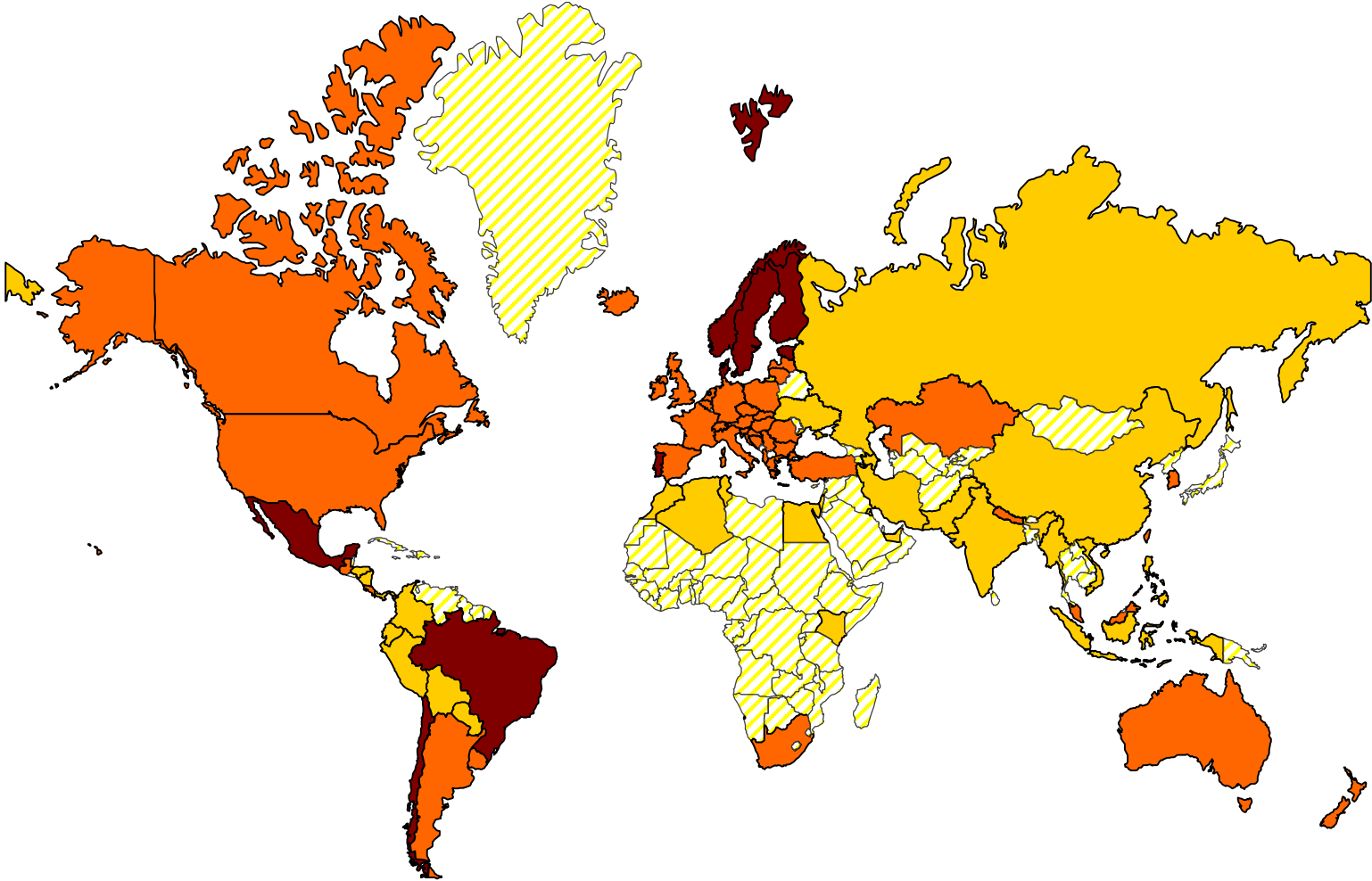
International Market Overview & Forecast



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Global overview

International E-Invoicing Market



Leaders

Average

Developing

Laggards

Development of E-Invoicing Market Penetration



Recipient segment	Annual bill & invoice volume estimated to be at least		Estimated electronic proportion of total volume in 2014		Estimated annual volume increase in electronic bills/invoices	
	World	Europe	World	Europe	World	Europe
Consumer	330 billion	18 billion	>8%	14%	20%	15%
Business & Government	170 billion	17 billion		24%		22%

There are clear indications, that the number of consumer bills especially in Latin America and some Asian countries is significantly higher than the B2B/B2G/G2B volume. In many European countries is the 50:50 distribution between these two segments roughly confirmed.

- Payment, Trade Finance and Procurement as main drivers
- Preference for optimization of internal operations (AR and AP management); E-Invoicing just one feature of P2P automation
- Increasing focus on collaboration with trading partners
- Direct exchange of E-Invoices among trading partners dominates; compared to Europe and LATAM, 3rd party operators still not yet very numerous
- E-Invoicing gains more traction
- The market for E-Invoicing is opening up. In 2013 at \$280 million, PayStream Advisors predicts demand is growing at a compound average annual growth rate of 13 percent. PayStream anticipates seeing the majority of this growth in SME's, as electronic invoicing trickles down from the large, early adopters.

- Very strict legislation
- E-Invoicing pushed by public sector
- Real-time audit or invoice data mining by tax authorities with the aim of combating tax evasion
- Obligations for E-Invoicing announced/planned in Chile, Costa Rica, Ecuador, Guatemala, Uruguay (local stakeholders expect a jump to 70% E-Invoicing market penetration in the country by 2015)
- Brazil, Mexico and Chile as market leaders
- Mexico with the highest absolute and relative growth rates in 2013

- First steps with B2C E-Billing; B2B legislation missing in many countries; sometimes, EDI invoices & paper originals
- Many advanced countries are more likely to adopt the (tax) control focussed LATAM model than the liberal European model
- Russia with tremendous relative growth rates, but volume still relatively low
- Some other countries mandate the market participants to exchange invoices in electronic format, e.g. Kazakhstan, Nepal, Singapore, critical industries in Turkey, ...
- Some countries are in the process of closing the loop between tills at points of sale – tax authorities – and clients. This happens either with the help of fiscal printers or electronic receipts (similarities with E-Billing)
- Several advanced initiatives of federal administrations in the Pacific Region, including e-Procurement

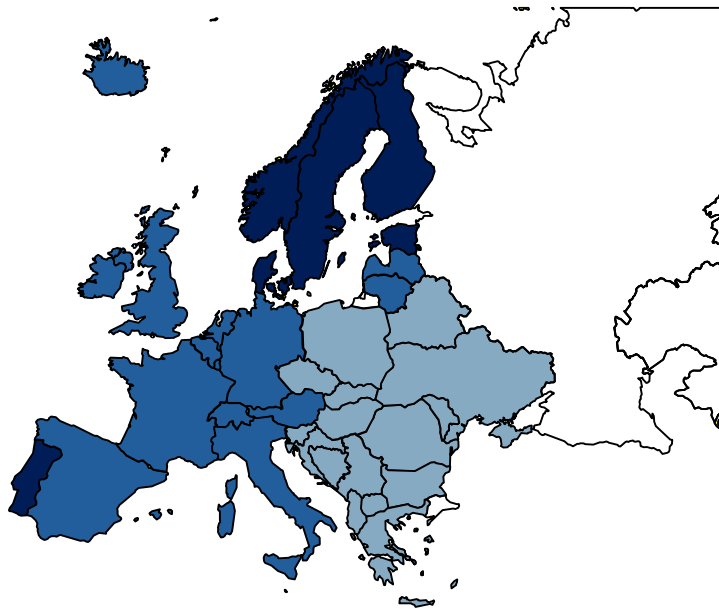
European Market

Market Penetration 2014

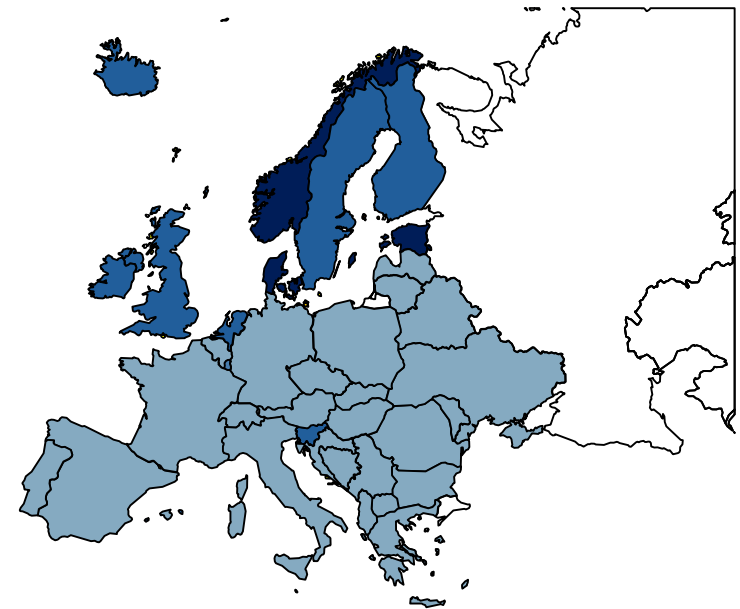
(Electronic share of total invoice/bill volume)



B2B/B2G/G2B



B2C



 >40%

 15-40%

 <15%

2014 – Countries with growth rates above European average



- **Norway B2G and B2B:** acceleration caused by the obligation to send electronic invoices in the public sector and a very mature market offered by solution providers
- **Finland B2C:** acceleration due to the substitution of national Direct Debit by E-Invoicing
- **Italy B2G:** First rollout step mandating suppliers to send invoices just electronically to the public sector. In the final phase, about 11,000 public administrations (central and local level) and probably 2 to 2.5 million suppliers will be affected by this obligation.
- **Austria B2G:** About 80,000 suppliers are obliged to send invoices to the federal administration just in structured electronic format since January 1st 2014
- **Portugal B2B/B2G:** Since January 2014, all invoices have to be provided to the system of Portuguese tax authorities.

2014 – Segments with growth rates below European average



- **Retail segment B2B:** Some very large EDI Clearing Centres already showed sharply declining growth rates in previous years. Some of them increased the E-Invoicing volume just by 5 percent. However, in Southern and Eastern Europe, the volume is still growing significantly.
- **Many large billers** in the Telecom, Utility and Card industry lose steam to convince many more customers of the benefits of the electronic bill/invoice.
- **Switzerland B2B:** In the healthcare segment, already more than 60 million invoices are exchanged just electronically in a structured format. The segment is almost saturated and the annual growth rate could drop to one digit percent rates.

Development of European Market Penetration



Electronic share	2009	2010	2011	2012	2013 (E)	2014 (E)
B2C	6%	7%	10%	11%	13%	14%
B2B/B2G/G2B	7%	10%	13%	15%	20%	24%
Weighted average	6%	9%	11%	14%	18%	21%

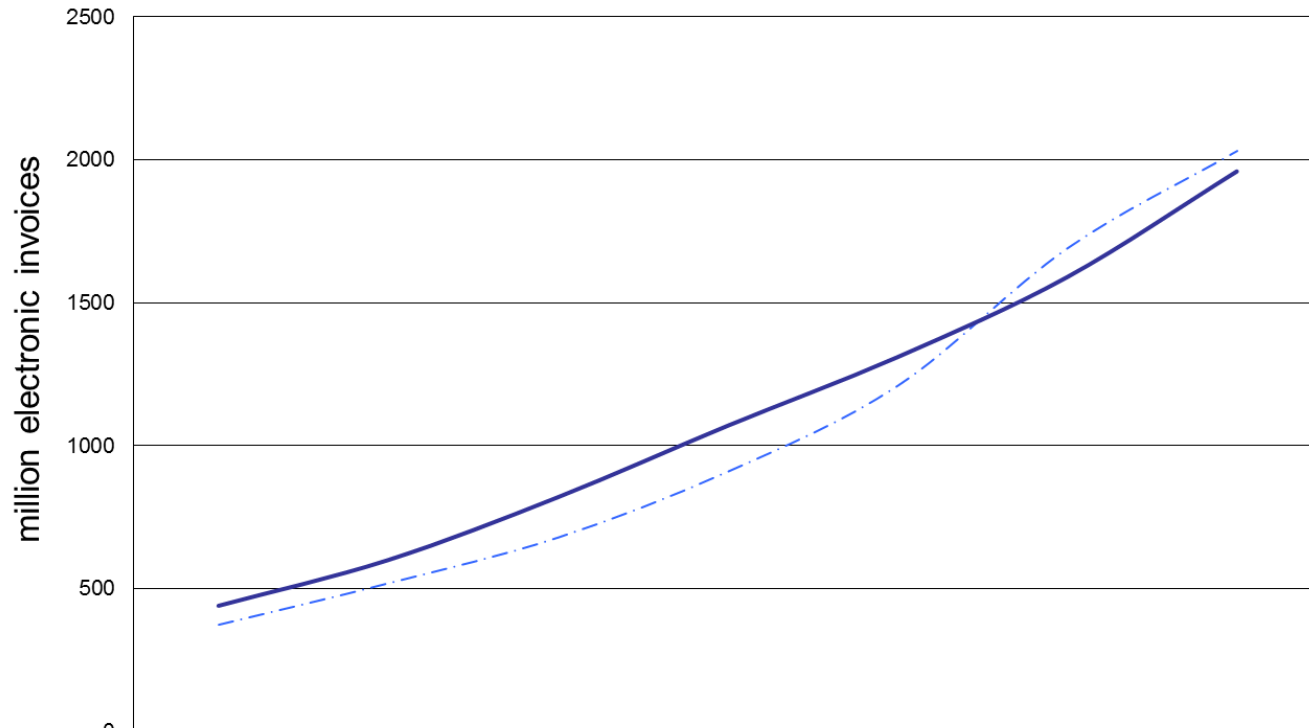
2013: Statistical jump due to new EU legislation, shifting unsigned PDF invoices (not legally valid until end of 2012) to valid E-Invoices and therefore now considered in these E-Invoicing statistics.

Channels Used for Electronic Invoices

B2B/B2G/G2B volume



B2B/B2G/G2B: Electronic invoice volume transferred directly or via service providers



	2008	2009	2010	2011	2012	2013 (E)	2014 (E)
B2B Supplier/Buyer Direct	375	520	680	910	1210	1690	2030
B2B via Service Provider	440	600	820	1070	1310	1590	1960

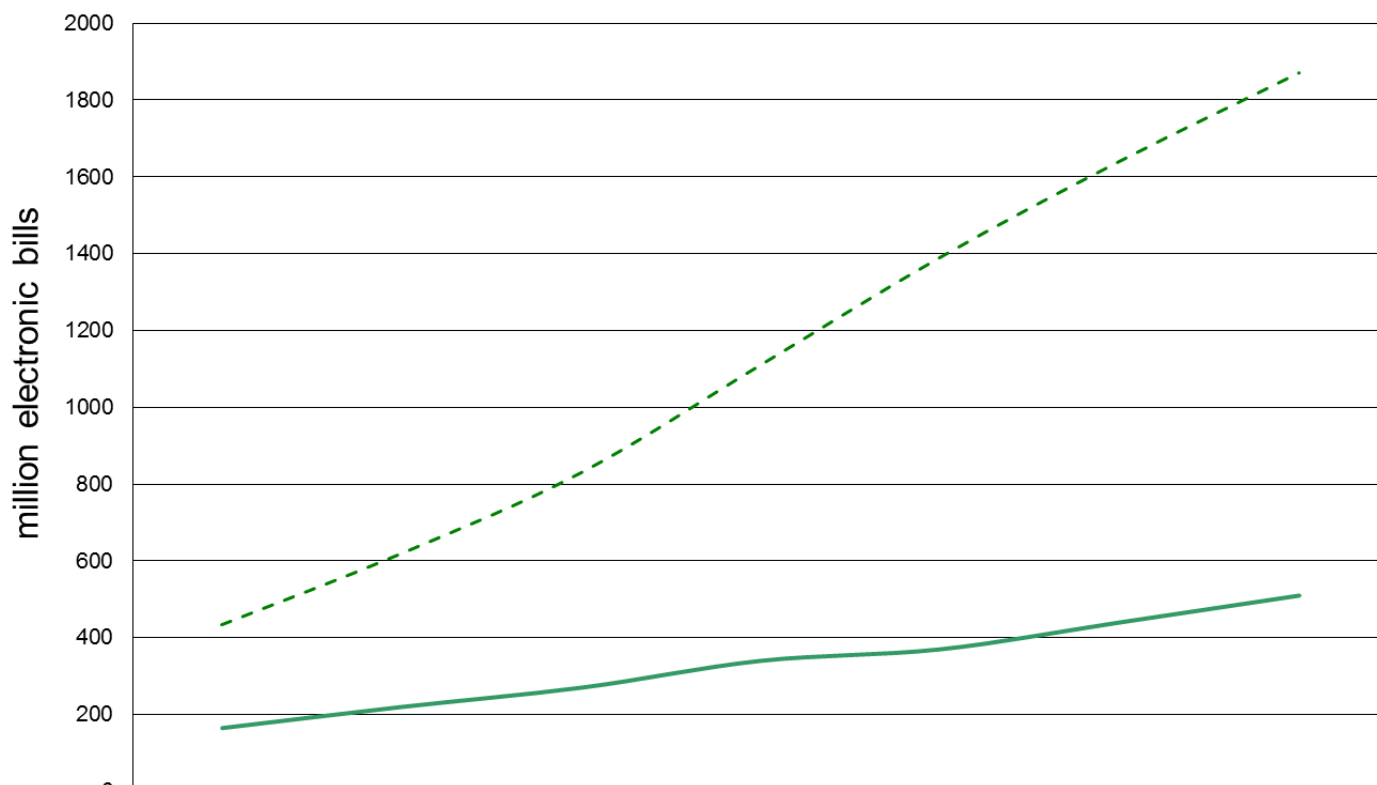
The strong increase in direct volume is mainly a statistical effect. Due to the new legislation in EU countries, a portion of the unsigned PDF invoices now belongs to the “tax compliant” invoices and are therefore considered in these statistics.

Channels Used for Electronic Bills

B2C volume



B2C: Electronic bill volume transferred directly or via service providers



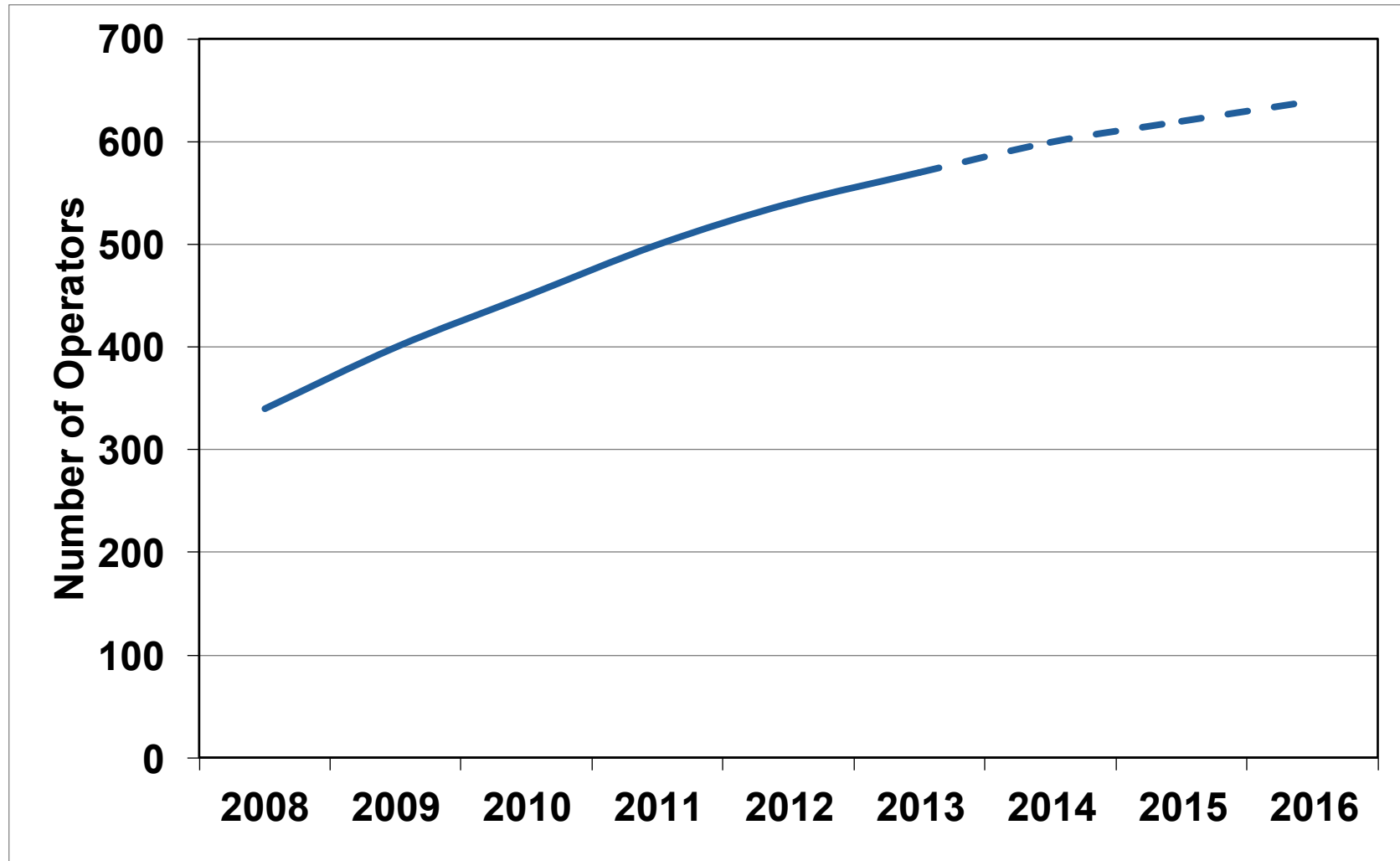
	2008	2009	2010	2011	2012	2013 (E)	2014 (E)
B2C Biller Direct	435	620	830	1110	1390	1640	1870
B2C via Service Provider	165	220	270	340	370	440	510

A Dutch and a very large German Telco operator lose steam and the proportion of its E-Invoicing users increases just modestly. Due to its size (15+ million e-bill subscribers), it has an impact on the European figures. In 2012, a very large biller changed from Service Provider to the Biller Direct model.

E-Invoicing network operators in Europe

- Provider offerings
 - Price erosion again substantial, especially on the supplier side and for the classic transaction business with little added value
 - Increasing importance of further added values
 - Trade finance
 - Spend analysis
 - Broad market coverage (directly or via partners)
 - Interoperability and open platforms
 - Support for processes and messages exchanged before an invoice appears
- New operators in countries with powerful public sector projects
- Challenging application replacements by 1st generation service providers. Some probably sell their business, others might re-design/re-build their solutions and a few are expected to buy the basis services as white label solutions from competitors.

E-Invoicing network operators in Europe

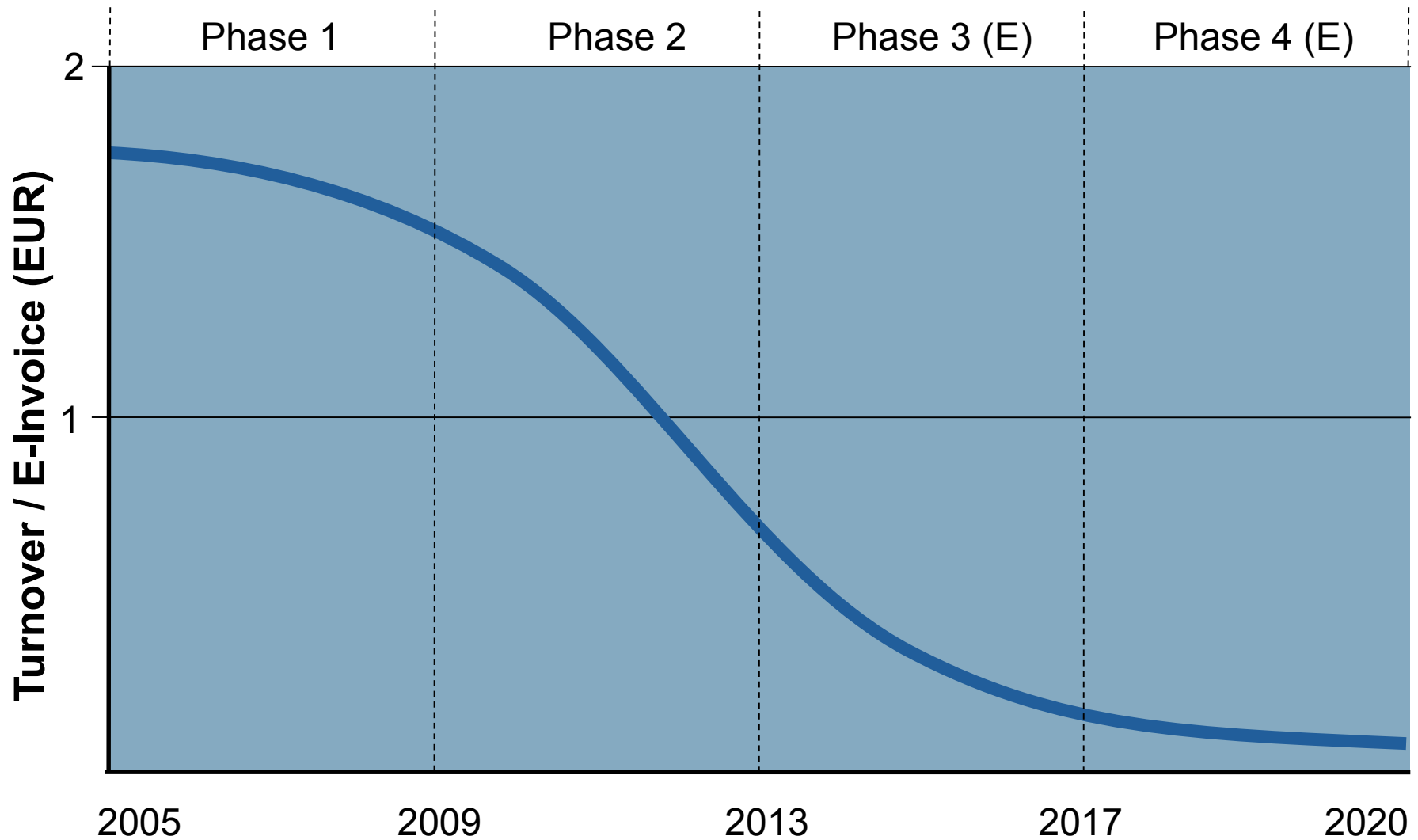


The service provider community in 2014 might generate a transaction based E-Invoicing/E-Billing turnover of 1.8 billion Euro in Europe. The turnover* is estimated to grow annually by 8-12% during the next 3 years.

*) Besides this transaction-based turnover, additional business is generated with the application and integration business. The valuation of that part is the subject of future investigations.

E-Invoicing Network Operator Turnover (1)

Evolution of the Metric Turnover/E-Invoice (B2B/B2G/G2B)



E-Invoicing Network Operator Turnover (2)

Assumptions, considered providers and calculation base



- Service Providers acting in Europe and including all categories of operators (EDI Clearing Centres, focussed E-Invoicing operators, others like electronic marketplaces) are considered; depending on the degree of added value and international coverage, the services are not necessarily directly comparable, but all operators considered have in common that they process and exchange tax compliant E-Invoices.
- The author developed concrete benchmarks in 2004 and 2009 based on the typical size/volume of senders and recipients at that time and investigated the situation again in January 2013 and 2014.
- The ratio of the turnover and the volume processed by many operators enhanced with inside information on consulting projects are the sources considered.

E-Invoicing Network Operator Turnover (3)

Phase 3 (2013-2017)



- The public administration becomes a user, thereby
 - affecting the vast majority of enterprises in each European country.
 - significantly increasing the number of users as well as the processed volume.
- Most countries declaring some level of obligation to E-Invoicing might see additional service providers trying to play a role between the suppliers and the public administration. This is despite the fact that federal administrations typically do not intend to pay a fee as an E-Invoice recipient, but just as an issuer.
- Increasingly, service providers rely on just the fees of senders of electronic invoices and other business documents.
- Bi-directional exchange of business documents becomes more popular; the income erosion per E-Invoice might be at least partially compensated through additional business messages and other added-values.

E-Invoicing Network Operator Turnover (4)

Phase 3 (2013-2016)



- The price erosion might be driven by further parameters
 - Discount providers gain traction.
 - The new legislation in EU countries gives a boost towards direct exchange of PDF invoices, bypassing the service providers.
- Service provider contracts with the first generation of large E-Invoicing users might expire, resulting in tough price negotiations for renewal.
- Standardization of E-Invoicing makes changes from one service provider to the next easier.

The Turnover/E-Invoice is estimated to erode by 13-17% p.a. However, new related business opportunities might appear and we are not to be concerned about the survival capability of agile providers.

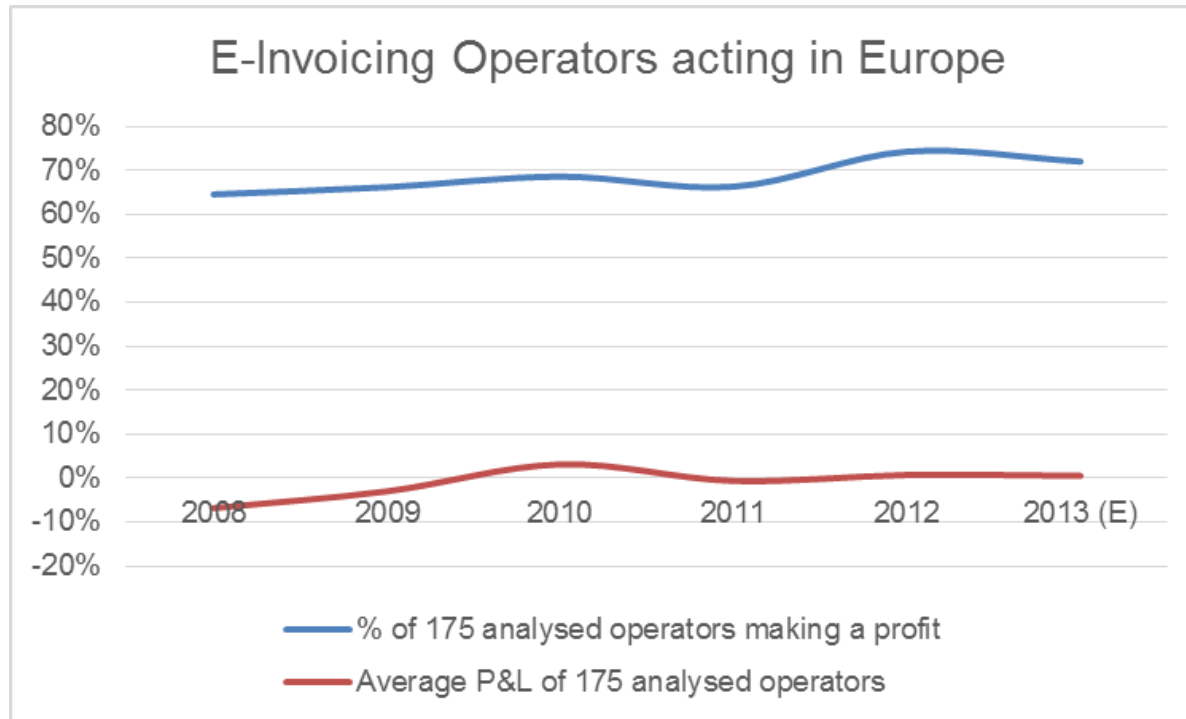
E-Invoicing Network Operator Turnover (5) *Phase 4 (2017-2020)*



- Mass market
- E-Invoicing as a commodity business
- Service providers might offer the services on average for the price “internal costs + small margin” (e.g. EUR 0.10 ± 0.05) and use it as a base for other added-values.
- Why did I not explicitly mention the operators offering the services “for free”? → Because the previous slides consider the “whole operator community”, and the figures build averages.

A limited number of operators are expected to be competitive due to economies of scale. Others might differentiate themselves by offering added value along the electronic supply chain or by focussing on interesting market niches.

Financial figures of 175 E-Invoicing network operators acting in Europe



Analysis:

- Only considers providers with E-Invoicing as a significant part of their business (at least 1/3 of turnover)
- Hard facts & figures from 175 financial statements / annual reports

In 2012, almost $\frac{3}{4}$ of the operators analysed generated a profit. In most cases it was a very moderate profit, and therefore, the operator community as a whole does not de-facto make any profit with the transaction business. It seems that the improved financial flexibility is immediately invested to gain additional market share (marketing & sales, price reductions, ...)

Please find further details in the Market Report
“E-Invoicing / E-Billing 2014”

Report issued in May 2014.

For further information, please visit
www.billentis.com

Definitions & Methodology

Definitions as used in my statistics

Not considered in my statistics

E-Invoices

Transported and archived fully electronically from end-to-end in a tax compliant manner; 2013: 18%+ in Europe

Electronic, nok

Fully electronic, but not tax compliant due to lack of integrity, authenticity and legibility; \approx same volume as tax compliant invoices

Semi-electronic

Electronic invoices are supported by paper summary invoices, scanned or printed/archived by recipients; \approx same volume as tax compliant invoices

Transported and archived as paper only

Major bulk of paper invoices

- Screening and interpreting 650+ key sources, including:
 - User surveys in countries (AT, ES, FR, PT etc.) and industries (e.g. banking associations, GS1, santésuisse, ...)
 - Figures from large invoice issuers & recipients (e.g. Deutsche Telecom with around 600 million invoices issued p.a., public sector in several countries representing 10%+ of invoice volume in each country)
 - Figures of leading service providers
 - Consolidated figures of domestic E-Invoicing associations
- In total, results of surveys with 15,000+ enterprises and 10,000 consumers are considered in these statistics and forecasts