

**GOOD PRACTICES IN THE ADOPTION AND PROMOTION OF E-INVOICING IN EUROPE:
RESULTS OF THE EMSF GOOD PRACTICES CONSULTATION**

An ACCA Discussion Paper

prepared for Activity Group 2 of the European Multistakeholder Forum on e-invoicing.

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INTRODUCTION

This Discussion Paper presents the findings of a high-level, pan-European consultation on good practices in the adoption and promotion of e-invoicing. It draws on the views of expert professionals and stakeholders in 21 EU member states to identify what initiatives, products and policies have worked well, who the leaders in e-invoicing adoption are and how their success might be replicated.

Background to the consultation

In December 2010, in a Communication entitled 'Reaping the Benefits of the Digital Agenda'¹, the European Commission set out its vision for making e-invoicing the dominant form of invoicing in Europe by 2020. This Communication in turn constituted the Commission's response to a public consultation² on the 2009 final report³ of the EU Expert Group on e-invoicing, originally set up in 2007.

'Reaping the Benefits of the Digital Agenda' proposed the creation of a European Multi-Stakeholder Forum (EMSF) on e-Invoicing in line with the Expert Group's proposals, as well as the creation of corresponding National Multi-stakeholder Fora in the member states. Its recommendations were accompanied by a Commission Decision⁴ specifying the following Terms of Reference for the EMSF:

'5) The communication [3] from the Commission entitled "Reaping the benefits of electronic invoicing for Europe" proposes the establishment of a European multi-stakeholder forum to assist the Commission in coordinating actions at Member States level and identifying measures at Union level to facilitate the mass adoption of e-invoicing.

(7) The group's main task will be to monitor the uptake of e-invoicing and to help to develop the e-invoicing market across the Member States. It should liaise with national multi-stakeholder fora and pay particular attention to cross border aspects of e-invoicing and the uptake of e-invoicing by small and medium-sized enterprises.

(8) The European multi-stakeholder e-invoicing forum should be composed of members from national fora and representatives of European associations from the users' community, the European Committee for Standardisation (CEN), the

¹ 'Reaping the benefits of electronic invoicing for Europe' Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM/2010/0509 final - COD 2010/0262 <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0712:FIN:EN:HTML> Accessed 15 August 2012.

² 'Consultation on the Final Report of the Expert Group on e-invoicing' http://ec.europa.eu/internal_market/consultations/2009/e-invoicing_en.htm Accessed 15 August 2012.

³ *Final report of the Expert Group on e-invoicing* European Commission, DG Internal Market and Services; DG Enterprise and Industry. November 2009 http://ec.europa.eu/internal_market/consultations/docs/2009/e-invoicing/report_en.pdf

⁴ 'Commission Decision of 2 November 2010 setting up the European Multi-Stakeholder Forum on Electronic Invoicing (e-invoicing)' *Official Journal C 326*, 03/12/2010 P. 0013 - 0015 <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:326:0013:01:EN:HTML> Accessed 15 August 2012

European Central Bank (ECB) and the Article 29 Data Protection Working Party.’

At the first EMSF meeting in November 2011⁵, it was decided that the Forum’s activities would be broken into four strands and each assigned to an Activity Group led by two activity leaders:

1. Monitoring the e-invoicing uptake in Member States and at EU-level
2. Exchange of experiences and good practices
3. Propose appropriate solutions for remaining cross-border barriers
4. Migration towards a single e-invoice standard data model

Activity Group 2 (Exchange of experiences and good practices) was led by the UK delegation⁶ and presented its proposed work programme to the EMSF activity leaders and the Commission in January 2012. This included a consultation on good practices in the member states, the results of which are presented in this Discussion Paper.

About the consultation

On 19 January, the Activity Group launched its consultation on good practice, inviting members of the National Multistakeholder Fora and experts nominated by them to complete a detailed online questionnaire and a qualitative survey.⁷ At the core of the consultation process, responses from the National Fora were developed by consensus among multiple national stakeholders and therefore carry substantial weight despite their small number.

This paper reports on 81 online survey responses (including 12 from National Fora) and 7 consultation submissions received by 23 July 2012. While it is disappointing that information could not be obtained from all National Fora, this report should either encourage the remaining Fora to respond or provide them with a means of validating the responses of others.

Table 1 summarises the response received to the online survey.

	General Sector						Total
	Government	Service Provider	Individual Business	Bank or Advocacy Group	Other Private Sector	National Forum	
Austria						1	1
Belgium		1	1	1		1	4
Bulgaria		1					1
Croatia				1	1		2
Cyprus	2			1	1	1	5
Denmark	3	2	1	1	2		9
Estonia	1			1			2

⁵ [Minutes](#) of the first EMSF meeting are available on the Commission website.

⁶ Originally Charles Bryant (OB10) and Emmanouil Schizas (ACCA). E. Schizas has since stepped down, and been replaced by Nigel Taylor (GSX)

⁷ All relevant documents and guidance are available in Annex D.

Finland		1				1	2
France		5					5
Germany		2	1		2		5
Ireland						1	1
Italy			1	6	1		8
Luxembourg						1	1
Netherlands		1				1	2
Poland			1			1	2
Portugal	1	3	5	2	2		13
Romania		1					1
Slovakia						1	1
Spain		2	1	1		1	5
Sweden			2		1	1	4
UK		2			1	1	4
EU-wide		3					3
All countries	7	24	13	14	11	12	81

ACCA has prepared this report at the request of the EMSF and the Commission and presents it to all stakeholders for discussion. Although we believe that the conclusions presented here are a faithful representation of the views submitted to the consultation, they are not the views of ACCA, nor are they binding on the EMSF Activity Group on Good practices, the EMSF, or the Commission. Furthermore, as the consultation process is ongoing it is possible that additional input may alter or qualify the findings reported here.

PART 1: DEFINITIONS

To ensure the insights from the EMSF's work on good practice are comparable across countries, the consultation sought a common understanding of what good practice consists of in the adoption of e-invoicing. There are two elements to this debate. First, what constitutes e-invoicing, and second, what constitutes good practice.

Respondents were asked to comment on the proposed definition of e-invoices as

“invoices that have been issued and received in electronic format. This includes structured e-invoices that are transmitted, processed and archived fully electronically from end to end throughout their life-cycle and unstructured e-invoices, for example in .pdf format. In any case, invoices must be tax-compliant.”

The following groups of observations emerged from the consultation:

- **PDFs are not seen as full e-invoices:** There is significant controversy around treating PDF invoices as e-invoices. While a number of national fora, four service providers and one individual business advised against including them in the definition of e-invoicing, few respondents wrote in their defence. One consultant suggested that PDF invoices might be considered e-invoices for B2C, since the case against classifying PDF invoices as e-invoices becomes less relevant in this case. One national forum and one service provider noted that, even if the Commission wishes to include PDF in its definition of e-invoicing, it should at least concede that it is substantially different from other forms, and try to disaggregate any

analysis or statistics (e.g. distinguishing between 'digital invoicing' and 'e-invoicing') to reflect this.

A robust defence of PDF came from the Dutch Forum, which pointed to the sheer numbers of PDF invoices in their country as evidence that PDFs cannot be easily dismissed and may be a stepping stone towards further adoption, even though they acknowledged that they are not the most efficient invoicing format around and could under some circumstances become a barrier to adoption of true e-invoicing. Similar arguments were made by respondents in Spain, whereas one respondent from Romania noted that if PDFs do contain structured information they should be seen as a good stepping-stone to further adoption. The Polish Forum, despite stressing that PDFs do not deliver the full benefits of e-invoicing, also acknowledged that this question is academic for all but the largest buyers.

That said, there was more willingness to consider the parallel provision of PDFs as an important element of e-invoicing. Some Fora noted that this would provide reassurance to some parties and provide a human-readable version of the invoice as required by the new VAT directive.

- **Unstructured invoices are generally not seen as full e-invoices:** A large number of National Fora, two government agencies, two service providers, five advocacy groups, three individual businesses and two private sector experts suggested that unstructured invoices should not be accepted as true e-invoices. One national forum and one service provider did, however, warn that many formats considered to be 'unstructured' can be in fact 'structured' and vice versa, while another national forum pointed out that unstructured invoices may be acceptable as a first step towards full e-invoicing if they help overcome behavioural resistance from businesses. One advocacy group suggested that unstructured 'messages' should also be acceptable under a common definition.
- **E-invoicing must span the entire invoice lifecycle, both natural and regulatory:** A number of National Fora, one individual business, one advocacy group and three service providers suggested that e-invoices should render manual or paper-driven processes redundant in all ways and enable the electronic processing of invoices throughout their lifecycle, including archiving. One national forum pointed out that the definition should not specify only the processes of 'issuing' and 'receiving' as e-invoicing, nor rely on references to 'formats' as this would be technologically biased. One government agency also suggested that invoices that cannot be integrated into ERP systems should not be treated as e-invoices. One National Forum and one private sector expert suggested that only formats facilitating secure invoice transmission can be classified as true e-invoices. A government agency and two service providers suggested that e-invoices should ensure integrity and authentication, while two individual businesses suggested acknowledgment of sending/receipt, control and traceability are also important elements of a true e-invoice. Finally, some parts of the invoice lifecycle are completely determined by legislation: in Italy, for instance, many stakeholders pointed out that e-invoices needed to capture the explicit agreement between buyer and seller and be preserved for 10 years, so a workable definition of e-invoicing in Italy would need to be much broader.

- **E-invoicing must ensure compliance in the broader sense:** One national forum and one service provider suggested expanding the definition of e-invoicing to include general, not just VAT compliance, as not all suppliers are VAT registered. One national forum, however, suggested that tax compliance is independent of the definition of e-invoicing. One National Forum suggested that only e-invoices treated by the law as equivalent to paper invoices should be included in official statistics and analyses of adoption. One government agency suggested that a minimum level of invoice content should be required in order to consider an invoice under the e-invoicing definition.

Defining good practice

Respondents were also asked to comment on the proposed definition of good practice in the adoption of e-invoicing as

"Simply doing things that are shown to work or be effective and that conform to applicable commercial and legal governance."

- **Good practice is dynamic and context-specific.** Two National Fora, one private sector expert and two service providers noted that definitions of good practice need to be dynamic, ensuring that promising practices which have yet to bear fruit, or whose returns are conditional on other policies or commercial practices being implemented, are not eliminated. One national forum and one advocacy group stressed the need to identify what constitutes good practice in a given context as opposed to universally; one private sector expert elaborated further by adding that instances of good practice need to account for the business partners involved and impacts on internal processes.
- **Good practice is behaviour change, not just products or processes.** Two national fora, two service providers and one advocacy group suggested that the phrase 'simply doing things' was confusing, and underemphasise the amount of behavioural change involved in good practice in e-invoicing adoption – this would suggest that the actual business process is only a small part of good practice. One service provider suggested that 'good practice' should involve elevation of e-invoicing to the status of a public utility – if not in terms of public provision, at least in terms of it being part of the national business infrastructure. Similarly, one national forum, one private sector expert and one government agency noted that the definition of good practice over-emphasises 'front-office' adoption and under-emphasises integration with the rest of the business. One service provider felt that good practice should be accompanied by specific milestones for adoption
- **Good practice must be good for business.** One service provider stressed that a minimal level of onboarding and adoption should be required in order for any commercial practice to qualify as 'good practice'. Two national fora, one service provider, two advocacy groups, a private sector expert and one government agency suggested that good practices must deliver demonstrable benefits in terms of money or time saved for businesses. Others added tax authorities and citizens to the list of beneficiaries. One national forum suggested affordability and ease of (re)use should be considered an element of good practice. One service provider urged that reliability should be a requirement for practices to qualify as 'good practice'. Finally, one national forum, one service provider and a private sector expert suggested that

certainty of compliance should be considered an element of good practice – although it is likely that other stakeholders felt this to be self-evident.

- **Good practice must cross borders.** One national forum and two private sector experts stressed the need to add an EU-wide dimension to definitions of good practice, ensuring that practices conducive to cross border trading and compliance are given particular consideration. One service provider stressed the need to ensure similar integration benefits across administrative regions in individual countries.

PART 2: WHAT HAS WORKED SO FAR – HEADLINE FINDINGS

To understand the current state of adoption in the EU, it is necessary to take stock of current practice and what experts feel has driven adoption in their respective countries. The national Fora and their nominated experts were therefore asked to rate a number of models of e-invoicing adoption in their respective countries as well as indicate their level of agreement with a range of statements regarding the state of adoption. This section presents these findings, focusing where necessary on the most successful models of adoption. Where responses are presented in summary, a full list, including average and median ratings, is available in Annex A.

As Table 2 shows, service providers have contributed significantly to current overall levels of adoption. The most successful model of adoption appears to have been the B2B buyer-driven supply chain model, with a good deal of such adoption crossing national borders. Use of EDI and total invoice management have also been significant contributors. Finally, it is worth noting that public procurement and public sector buyers have played a very limited role in e-invoicing adoption thus far, although their role has been more decisive among many of the member states best known for embracing e-invoicing.

Models	Mean	Median
1. B2B Buyer-driven supply chain model at national level - Supported by a service provider	3.38	4.00
2. B2B EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/documents - Supported by a service provider	3.20	3.00
3. Integration of invoicing and ERP systems of businesses	3.11	3.00
4. Total invoice management model where a service provider processes all invoices in paper and in electronic form on behalf of a trading party (whether for suppliers or buyers)	2.88	3.00
5. B2B Buyer-driven supply chain model at multi-country/cross-border level - Supported by a service provider	2.83	3.00
6. B2B Supplier driven model at either national or international level in which suppliers send or make available invoices as part of the accounts receivable process - Supported by a service provider	2.81	3.00
7. B2C e-billing model where larger billers send or make available e-invoices to consumers/SME's via portals, email, Internet banking or by other means - Supported by a service provider	2.78	3.00
8. Marketplaces/ Hubs where participants in an electronic market place or special purpose hub send/ receive e-invoices as part of the service	2.58	2.00

9. B2G public procurement model at national level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Supported by a service provider	2.46	2.00
10. B2C e-billing model where larger billers send or make available e-invoices to consumers/SME's via portals, email, Internet banking or by other means - Not supported by a service provider	2.38	2.00
Note: Because ratings were coded '0' if respondents didn't have enough experience of individual models due to insufficient uptake or any other reason, mean ratings can be misleading. A median rating is also provided which is less affected by extreme values. The results are, in any case, similar.		

Table 3 demonstrates some of the reasons for this pattern of adoption.⁸ The most successful means of encouraging e-invoicing adoption so far appears to have been the decision by large buyers to make its use mandatory for all of their suppliers. Service providers are seen as having contributed by mediating between buyers and suppliers and ensuring compliance. Interoperability between service providers has also been a significant contributor to adoption. Consistent with the discussion in Section 1, the contribution of PDF invoices is seen as less positive but PDF-driven adoption still ranks among the 10 most successful models.

Adoption drivers	Mean	Median
1. Buyers mandating e-invoicing or making it compulsory as part of a trading relationship	4.10	4.00
2. Inter-connection or interoperability between service providers	3.95	4.00
3. The availability of tools and techniques (either as a package or as components) to provide compliant e-invoicing including electronic signatures, EDI, or other means, including support for business controls as provided for in the new VAT Directive (2010)	3.75	4.00
4. Existence of an easy to use identification and addressing system domestically	3.70	4.00
5. The ability of business models to on-board large numbers of trading parties with ease and speed	3.70	4.00
6. Existence of an easy to use identification and addressing system globally or at the EU-level	3.58	4.00
7. The parallel provision of PDFs where structured information is handled	3.37	4.00
8. Cloud-based accessibility of e-invoicing platforms	3.33	3.00
9. Integration of the end-to-end “procurement to pay process” as opposed to a modular approach	3.30	3.00
10. The use of document images (e.g. PDFs)	3.04	3.00
Note: Because ratings were coded '0' if respondents didn't have enough experience of individual drivers due to insufficient uptake or any other reason, mean ratings can be misleading. A median rating is also provided which is less affected by extreme values. The results are, in any case, similar.		

Table 4 extends the findings of Table 1 to the small and medium-sized (SME) sector. Overall, adoption among SMEs is harder to achieve, with nearly all models performing less well among SMEs than among larger businesses. The B2B buyer driven model is once again the most successful to date, and service providers have once again been instrumental in driving adoption,

⁸ Due to a technical fault, a pair of questions regarding the contribution of Bank- and Payment Provider-driven models (generally and with specific reference to SMEs) were omitted from early versions of the online survey. Figures from these questions are cited in Annex 1, as this model did not make it into the top 10 by contribution in either case, but are based on a very small sample and should not be seen as indicative.

but in the case of SMEs e-billing and ERP integration account for a greater part of what progress has been made in promoting adoption.

Models	Mean	Median
1. B2b Buyer-driven supply chain model at national level, in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process (b=SME) - Supported by a service provider	3.30	4.00
2. B2C/b e-billing model where larger billers send or make available e-invoices to SMEs via portals, email, Internet banking or by other means - Supported by a service provider	3.10	3.00
3. Integration of invoicing and ERP systems	3.02	3.00
4. B2b EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/ documents - Supported by a service provider	2.74	3.00
5. Total invoice management model where a service provider processes all invoices in paper and in electronic form on behalf of a trading party (whether for suppliers or buyers)	2.72	3.00
6. B2C/b e-billing model where larger billers send or make available e-invoices to SMEs via portals, email, Internet banking or by other means - Not supported by a service provider	2.64	2.00
7. b2B Supplier driven model at either national or international level in which suppliers send or make available invoices as part of the accounts receivable process - Supported by a service provider	2.62	2.00
8. Marketplaces/ Hubs where participants in an electronic market place or special purpose hub send/ receive e-invoices as part of the service	2.56	2.00
9. B2b Buyer-driven supply chain model at multi-country/ cross-border level in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process - Supported by a service provider	2.53	2.00
10. b2G public procurement model at national level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Supported by a service provider	2.52	2.00
Note: Because ratings were coded '0' if respondents didn't have enough experience of individual models due to insufficient uptake or any other reason, mean ratings can be misleading. A median rating is also provided which is less affected by extreme values. The results are, in any case, similar.		

Table 5 suggests that adoption by SMEs has so far benefited from integration with SMEs' accounting software and affordability has been a substantial consideration. It also confirms that invoice content standards are an important driver of SME adoption. Bank solutions and government invoicing and procurement platforms have contributed relatively little, and information campaigns run by member states have either played an insignificant role in SME adoption or not been particularly effective.

Models	Mean	Median
1. Integration with SMEs' accounting software	4.01	4.00
2. Affordability	3.99	4.00
3. A common national standard for invoice content	3.93	4.00
4. Peace of mind on VAT compliance	3.75	4.00
5. A common EU standard for invoice content	3.67	4.00
6. Service provider solutions specifically aimed at SMEs	3.65	4.00
7. Little or no in-house IT resource necessary	3.56	4.00
8. Information and awareness campaigns targeting SMEs	3.53	4.00

9. Bank solutions specifically aimed at SMEs	3.16	3.00
10. Publicly available platform provided by the government	3.02	3.00
Note: Because ratings were coded '0' if respondents didn't have enough experience of individual drivers due to insufficient uptake or any other reason, mean ratings can be misleading. A median rating is also provided which is less affected by extreme values. The results are, in any case, similar.		

In addition to the effectiveness of different adoption models, member states vary in the extent to which different motivations have shaped the adoption of e-invoicing. Overall, as Table 6 demonstrates, efficiency and cost savings have been the most significant factors motivating business adoption of e-invoicing, followed by financial integrity concerns and the pursuit of prompt payment. Interestingly, access to the public procurement market ranked very low as a motivation for e-invoicing adoption, and access to finance ranked even lower. This result is surprising, as is the low level of correlation between access to finance and prompt payment as motivators; the two are, in practice, very closely linked. Given the leading role of buyer-driven models in promoting adoption, access to corporate supply chains also ranked surprisingly low.

Models	Mean	Median
1. Process efficiencies and cost savings	4.30	5.00
2. Financial control/ auditability	3.54	4.00
3. Prompt payment	3.38	4.00
4. Compliance with VAT rules and regulation	3.28	3.00
5. Access to corporate supply chains in the private sector	3.14	3.00
6. Environmental benefits/ saving on paper etc.	3.12	3.00
7. Access to the public procurement market	2.64	2.00
8. Access to international markets	2.62	2.00
9. Access to finance	2.46	2.00
Note: Because ratings were coded '0' if respondents didn't have enough experience of individual motivations due to insufficient uptake or any other reason, mean ratings can be misleading. A median rating is also provided which is less affected by extreme values. The results are, in any case, similar.		

Are ratings biased?

Responses to the consultation have come from a number of sectors, each with their own outlook and experiences of adoption. Due to the limited number of expert contributors, biases may have made their way into our findings as a result of the composition of the sample. In particular, given the fact that service providers accounted for 30% of responses, it is important to test whether the significant contribution of service providers established above is in fact due to a self-serving bias.

Our test consists of testing whether, after controlling for country effects, the difference in respondents' ratings between service provider-supported models and their unmediated versions is larger in a statistically significant way if the respondent is a service provider. Table 7 presents the results of this test, which indicate that, while the ratings of mediated models by service providers are generally more positive, there is no significant service provider bias at play. In fact, in the case of the B2B supply-chain driven model, individual businesses viewed the contribution of service providers more favourably than the service providers did themselves ($p < 0.06$).

Table 7: Testing for respondent bias among service providers		
	Difference in ratings between service provider supported and unmediated models that can be attributed to service provider bias	
Models	Coefficient sign	Significance
B2B Buyer-Driven Model (national)	+	0.378
B2B Buyer-Driven Model (cross-border)	+	0.314
EDI	+	0.903
Self-billing	—	0.49
B2G Procurement-Driven Model (national)	+	0.411
B2G Procurement-Driven Model (cross-border)	+	0.2
e-billing	+	0.15

Note: coefficients are derived from ordinal regression analysis. The difference in ratings was the dependent variable, while all available country and sector dummies were introduced as independent variables. The 'EU-wide' and 'National Forum' dummies were left out intentionally as they provided the most neutral perspectives and could therefore be used as reliable reference categories.

Finally, Table 8 summarises the attitudes of government and the public sector towards e-invoicing. As government policy is specific to individual member states, the headline level of agreement is less important than the relative standing of individual countries. There are of course some similarities – policymakers in Scandinavian countries, for instance, take relatively similar approaches to e-invoicing.

Table 8: Public sector attitudes to e-invoicing		
Statements indicating public sector attitudes to e-invoicing	% agreeing	Countries in which experts were most likely to agree
1. Good practices are the same whether it's private or public sector purchasing we're talking about	63.0	UK, Cyprus
2. Government supports a single standard or a very small number of standards to the exclusion of all others	44.4	Denmark, Sweden, Estonia, Finland, the Netherlands, Italy, Ireland, Portugal, Belgium
3. When it comes to the e-invoicing agenda, the initiative in this country is expected to usually come from the EU	35.8	Cyprus, France, Spain, Ireland
4. Policymakers would rather support an inferior solution if it showed signs of becoming popular very quickly	30.9	No significant differences
5. Government has initiatives in place aiming to increase awareness of e-invoicing among businesses	30.9	Finland, the Netherlands
6. It is the public sector, rather than the private sector, that leads the e-invoicing agenda in this country	29.6	Denmark, Estonia, Sweden, Austria, Cyprus, Finland, Italy
7. Policymakers in this country rely substantially on the expertise of service and solution providers when	28.4	Cyprus, Estonia, Finland, Croatia, Belgium

discussing e-invoicing		
8. Government has set an example by adopting e-invoicing widely in its own procurement	25.9	Denmark, Sweden
9. My country has been a leader in Europe in setting up a policy framework/ public sector solution that encourages e-invoicing	23.5	Denmark, Estonia, Sweden, Spain, Belgium, the Netherlands, Germany, Portugal UK, Romania
Note: Due to small sample sizes, descriptive for individual countries would not have been reliable. Instead, the countries in which respondents were most in agreement with each statement were determined through ordinal regression analysis after accounting for sector biases. Countries are cited only if the country effect is significant at the 0.1 level, and are cited by order of significance.		

3. E-INVOICING ADOPTION DRIVERS AND MODELS IN EUROPE

For the purposes of this analysis, an **adoption driver** will be defined as any combination of commercial products, delivery methods, commercial/government policies and motivations for adoption that together correspond to a specific business case for buyers or suppliers adopting e-invoicing. E-invoicing adoption in each of the EU member states can therefore be said to rely to varying degrees on a number of drivers at once: for instance, adoption built on the use of EDI can coexist with adoption driven by the requirements of public sector buyers. The unique combination of drivers leading e-invoicing adoption in each member state defines its **adoption model**.

In order to identify and validate adoption drivers through the quantitative survey data collected from national stakeholder fora, the questions presented in Section 2 have been used as factor analysis inputs.⁹ Our analysis identified 10 distinct and uncorrelated factors.¹⁰ Based on the Section 2 questions they correlate with best (see Annex B), these were interpreted as follows:

1. **Service providers:** In countries scoring high in this factor, e-invoicing adoption relies on intermediation by service providers who act as the primary e-invoicing champions. Adoption is usually buyer-driven, but also includes mediated forms of self-billing and e-invoicing on online marketplaces. It should be noted that this factor also includes the use of total invoice management. **Belgium, Estonia and France** appear to rely most on service providers to drive adoption, while **Cyprus** relies on them the least.
2. **Government policy:** In countries scoring high in this factor, adoption of e-invoicing is driven by government buyers and public procurement, including a policy framework that encourages the use of e-invoicing. Access to public sector buyers is the primary

⁹ Questions regarding the effectiveness of Bank- or Payment Provider- led models have been omitted from this analysis as there were insufficient responses.

¹⁰ Selecting such cut-off points is more art than science. Statistically, additional factors are meant to be included until the eigenvalues fall below 1 (which would have identified 21 factors) or stop falling significantly from one factor to the next; we have taken the latter approach, which identified 11 factors. Despite efforts to ensure factors were uncorrelated (Varimax rotation was employed in the factor analysis, ensuring that factors would be uncorrelated), two factors in the original analysis were almost exact opposites (presence of a service provider v. absence of a service provider). As a result, while the latter factor was included in all further analysis, it is not discussed separately here.

motivation for adoption by business. **Denmark, Estonia, Finland and Sweden** rely the most on Government policy to drive adoption, followed by **Belgium, the Netherlands and Italy**.

3. **Certainty for small business:** Countries scoring high in this factor emphasise SME compliance through adherence to shared invoicing content standards, with government, banks and service providers targeting the SME sector with a tailored information and service offering. **Bulgaria, Finland and Romania** appear to rely most on providing small businesses with certainty and a tailored offering, while this element appears to be least developed in **Slovakia**.
4. **Cross border government procurement:** Countries scoring high in this factor make use of initiatives such as PEPPOL to open up government procurement processes to foreign businesses and ensure access for their own enterprises to opportunities abroad. This driver divides the member states into two roughly equal camps, with **Belgium, the Netherlands, Poland and Spain** appearing to rely the least on cross-border procurement to drive adoption, while **Ireland, Croatia, Italy, Portugal, Denmark and Germany**, tend to rely on it more.
5. **Strong commercial case:** In countries scoring high in this factor, the commercial benefits of e-invoicing, including financial integrity and certainty of compliance, are emphasised in driving adoption – making adoption essentially an internal decision for businesses. This driver appears to have been least significant in **Romania and the Netherlands**, and strongest in **Luxembourg**.
6. **E-billing:** In countries scoring high in this factor, adoption is driven by business-to-consumer and business-to-business e-billing involving large businesses, including self-billing facilitated by large buyers. The **Netherlands and Romania** appear to rely most on e-billing to drive adoption.
7. **EDI:** In countries scoring high in this factor, adoption is driven substantially by products connecting of multiple trading parties through Value Added Networks or secure point to point links for the exchange of structured supply chain data. This tends to be supported by a service provider. **Sweden, Slovakia and Spain** appear to rely most on EDI to drive adoption, while it is least significant in **Estonia**.
8. **VAT compliance:** In countries scoring high in this factor, certainty over VAT compliance has been a strong influence in encouraging businesses to use e-invoicing. In countries which mandate the electronic storage of documents, this involves providing invoices in PDF form parallel to the original format. The need for VAT compliance is understandably important everywhere, but it has contributed most to adoption of e-invoicing in **France and Austria**, and least in **Luxembourg**.
9. **Interoperability:** In countries scoring high in this factor, interoperability between service providers is a major focus of e-invoicing adoption, and relies on an easy-to-use identification and addressing system, both domestically and abroad. Interoperability has contributed most to e-invoicing adoption in **Croatia, Austria and Slovakia**.

10. Government awareness campaigns: In countries scoring high in this factor, government is relying on awareness-raising initiatives to promote e-invoicing to businesses. Such initiatives appear to have contributed the most to e-invoicing adoption in **Finland** and **the Netherlands**.

As Figure 1 shows, service providers as a driver of adoption dominate the analysis, with government policy a distant second. This means that the adoption models of different countries are distinguished much more by the extent of service provider and public sector leadership than by the presence of other individual drivers of adoption.

4. UNDERSTANDING PROGRESS IN ADOPTION

Knowing what has been effective in driving adoption of e-invoicing in individual member states is useful but without additional information it is impossible to identify good practice. Adoption of e-invoicing is on the rise across Europe – all drivers can be shown to ‘work’ to some extent or other; however some models of adoption have produced rapid uptake, while others have delivered only moderate progress. Moreover it is possible that some drivers may be best suited to spurring adoption at its earliest stages, while others may be more effective when a foundation has already been built. In order to identify e-invoicing leaders among the member states, a set of objective data is required measuring e-invoicing adoption. Unfortunately, the available data have significant limitations and so a cautious approach must be taken, based largely on qualitative indicators.

Identifying adoption leaders: a methodological note

Eurostat provides figures on the percentage of enterprises sending or receiving e-invoices in 2011 for most EU member states – even distinguishing between true e-invoices and standard invoices sent by electronic means. However, it is important to note that the lack of an intuitive consensus definition¹¹ of e-invoicing among respondents still means that responses might not be as well suited to international comparison as most Eurostat data.

In order to address this, we have allocated each EU member state to groups according to a) the percentage of large businesses (>249 employees) sending and receiving e-invoices b) the percentage of medium sized businesses (50 to 249 employees) sending and receiving e-invoices and the percentage of small businesses (10 to 49 employees) sending and receiving e-invoices. This process produces three adoption rankings per country, ranging from 1 (leader) to 6 (laggard). While we anticipate that membership of a ‘leader’ group need not necessarily mean a country is in fact an adoption leader, it is highly likely that membership of a ‘laggard’ group does indicate an actual laggard. We believe, however, that in grouping member states in this way and focusing on what determines membership of each group across size bands, we can avoid some of the ‘noise’ generated by the Eurostat methodology.

¹¹ The Eurostat definition refers to ‘an invoice where all data is in digital format and it can be processed automatically. A distinctive feature of an e-invoice is automation. E-invoice [sic] will be transferred automatically in inter-company invoicing from the invoice issuer’s or service provider’s system directly into the recipient’s financial or other application. E-invoicing comprises billing and payment information exchanged between the parties – businesses, the public sector, consumers – involved in commercial transactions, transmitted via the internet or other electronic means. The transmission protocol might be XML, EDI or other similar format.’

Another means of overcoming the limitations of the Eurostat data is to cross-reference these with the findings of Koch (2011)¹² in order to identify adoption leaders. Koch (2011) identifies leaders and laggards in terms of distinct stages in the market adoption of e-invoicing and allows for the fact that, especially among smaller enterprises, the majority of declared users may not in fact understand the legal requirements for e-invoicing in their countries or may be using solutions that deviate from many experts' views of what 'real' invoicing consists of.

The resulting sets of rankings overlap significantly of course, but adoption leader status in Koch (2011) is particularly correlated with medium and large business adoption as measured by Eurostat, even after controlling for individual adoption drivers. Koch's (2011) ranking additionally penalises countries relying disproportionately on e-billing, but rewards countries with supportive policy frameworks.

Table 9 provides a list of 'leaders' under each of the three rankings suggested above. Of these, Finland and Denmark are the clear leaders, appearing at the top four places regardless of the measure employed, while Norway, Sweden and Belgium are also very well placed, and Lithuania, while not appearing in the Koch (2011) rankings, tends to perform very well against Eurostat's measures of adoption.

Eurostat (2011) Large Businesses	Eurostat (2011) Medium Sized Businesses	Eurostat (2011) Small Businesses	Koch (2011)
Finland (89%)	Finland (78%)	Finland (59%)	Norway
Denmark (76%)	Denmark (58%)	Denmark (52%)	Sweden
Norway (68%)	Lithuania (56%)	Lithuania (46%)	Finland
Sweden (67%)	Belgium (46%)	Belgium (42%)	Denmark
Lithuania (62%)	Sweden (45%)	Latvia (38%)	Estonia
Belgium (57%)	Norway (43%)	Slovakia (34%)	Switzerland
Estonia (50%)	Latvia (43%)	Estonia (33%)	Slovenia

Table 10 summarises the statistical relationships between e-invoicing adoption drivers and several measures of progress in e-invoicing adoption among large and small businesses. It traces the shift from laggard to catcher-up and leader as well as the general progression from lower to higher levels of adoption.

	Full sequence			Leaving Laggard Group			Joining leader group			Koch (2011)
	Small	Mid	Large	Small	Mid	Large	Small	Mid	Large	
Service providers	++	+		+	+	+			+++	
Government policy	+++	+++	+++					+++		+++
SME certainty										
Cross-border procurement										
Commercial case								-		--
e-billing										
EDI		+++	++	++	+				-	
VAT compliance	---	---	--					--	--	--

¹² Koch, B (2011) *E-invoicing/E-billing in Europe and Abroad: From Evolution to Revolution* Billentis http://www.ukeag.org.uk/media/155/e-invoicing_europe_etc_bilentis_report2011.pdf

Interoperability				
Awareness campaign		+	--	

Note: Triple, double and single signs denote statistical significance at the 1%, 5% and 10% levels respectively. Laggard to catch-up and catch-up to leader drivers were determined on the basis of linear regression; 'full sequence' drivers were determined on the basis of ordinal regression and describe the dynamics of adoption in broad terms for the full set of countries. Determinants were the full set of ten adoption drivers identified in Section 3, as well as broad respondent sector dummies. The National Forum response dummy was omitted so that it could provide a reference point. This means that the regressions presented here are more likely to approximate National Forum responses in each country, even when no such responses were available. Dependents were leader dummies (on sample omitting laggards), laggard dummies (on sample omitting leaders) and broad adoption level variables derived from Eurostat figures (on the full sample). Leader status denotes membership of the top 2 adoption clusters in the Eurostat ranking, and laggard status denotes membership of the bottom 2 adoption clusters.

How to read Table 10

There are three sections to Table 10, each representing a different analysis on how individual drivers contribute to good practice.

The 'Full sequence' section explains the overall relationship between broad levels of e-invoicing adoption in a given country (based on Eurostat statistics) and the presence of each of the adoption drivers identified in our study. A positive sign next to an adoption driver means that the more common e-invoicing is in a country, the more influential this driver of adoption will tend to be. Therefore, drivers attached to a positive sign are more influential in countries where e-invoicing is more common, and drivers attached to a negative sign are more influential in countries where e-invoicing is less common. As such, a negative sign does *not* mean that the adoption driver has a *detrimental* effect on adoption rates.

The 'Leaving laggard group' section explains the differences between EU countries with *low* levels of e-invoicing adoption and countries with *average* levels of e-invoicing adoption, according to Eurostat statistics. A positive sign next to an adoption driver means that the more successful a country has been in moving from low to average levels of adoption, the more influential this driver of adoption will tend to be.

The 'Joining leader group' section explains the differences between EU countries with *average* levels of e-invoicing adoption and countries with *high* levels of e-invoicing adoption, according to Eurostat statistics. A positive sign next to an adoption driver means that the more successful a country has been in getting from average to high levels of adoption, the more influential this driver of adoption will tend to be.

Each section is broken into three columns, one for small enterprises, one for medium sized enterprises and one for large enterprises. These columns indicate the types of statistics on e-invoicing uptake that were used to allocate countries into leader and laggard groups. The 'small' column, for instance, reports relationships based on the percentage of small businesses (10-49 employees) sending and/or receiving e-invoices.

Finally, the Koch (2011) column to the right explains the differences between EU countries with *average* levels of adoption and countries characterised as adoption leaders by Koch (2011). A positive sign next to an adoption driver means that the more successful a country has been in moving towards high levels of e-invoicing uptake as measured by Koch (2011)'s methodology, the more influential this driver of adoption will tend to be.

In all cases the analysis has controlled for possible sector biases and is calibrated to most closely resemble the views of a Multi-Stakeholder Forum.

Implications for good practice

The most striking finding emerging from Table 10 is that, regardless of how adoption leaders are identified, or what level of adoption has already been achieved, government policy emerges as the most important determinant of progress in e-invoicing adoption. The influence of government policy on adoption occurs throughout the development of the e-invoicing agenda and across all enterprise size bands – in fact it would appear impossible for countries to achieve good practice without a government-wide commitment to e-invoicing.

A second important finding (though not a surprising one) is that adoption of e-invoicing by small and medium sized businesses is a more complex agenda than adoption by large businesses. In fact, it appears as though adoption by large businesses, as a more commercial and less behavioural consideration, is only a matter of time given a supportive public policy framework – it's bringing their smaller suppliers on board that is the real challenge. This appears to explain to a great extent the significance of service providers to adoption: they are vital to broad and inclusive adoption and the onboarding of suppliers where governments have chosen to avoid coercion. Their contribution is made even more crucial by the fact that other approaches targeting SMEs do not appear to have a significant effect on adoption.

An emphasis on VAT compliance appears to be most common in countries where adoption is still limited – as a rule, as long as the legal framework provides any less than complete certainty of compliance, countries will find it very difficult to join the leaders in e-invoicing adoption. A final finding concerns the use of EDI as an important element of early adoption. EDI-driven adoption is associated with countries leaving the 'laggard' groups and catching up with the leaders, and once again the effect is strongest among SMEs.

An alternative assessment of the data using CHAID analysis (Annex C) corroborates these findings. It confirms, first of all, that government policy is the primary driver of adoption across business sizes, and when this does not aggressively promote e-invoicing (by making it mandatory for government suppliers or others) then service providers typically find themselves having to make an additional effort to compensate – although their efforts can rarely replicate the effects of an aggressive policy framework. If, on the other hand, policy is supportive but not aggressively so, for instance by providing a reasonable legal framework but not mandating e-invoicing, then the onboarding of smaller suppliers becomes the main challenge and tax authorities become the most important stakeholder in e-invoicing adoption. Solutions that guarantee VAT compliance are emphasised, targeting large and medium sized businesses, by way of compensation. In those countries where service providers have limited resources or influence, they tend to target large businesses concerned with onboarding their smaller suppliers and focus on providing solutions tailored to SMEs that provide small suppliers with certainty.

PART 5: EXAMPLES OF GOOD PRACTICE¹³

Respondents to the consultation, including national Fora and their nominated experts, were asked to suggest examples of good practice either EU-wide or in their own countries which they credited with successfully promoting the adoption of e-Invoicing. Understandably the result is a very wide range of practices, products and initiatives, and it is unlikely to be exhaustive. However, a few key patterns can be observed:

- Service providers are crucial to the adoption of e-invoicing. Interoperability, proven on-boarding capability and a good range of value-added services are all crucial to their collective offering.
- E-Invoicing adoption is usually most successful when mandated by a powerful trading partner – this will typically be a major buyer but where the balance of power is reversed, major suppliers have also been known to take the lead. Many companies adopt e-Invoicing as part of a broader supply chain, procure-to-pay process
- Due to their central function of facilitating payments, banks are natural partners in the promotion of e-invoicing, but to date their contribution has mostly centred on e-billing and B2C invoicing. A relatively small number of early adopter countries have seen banks deliver to their full potential in this respect.
- E-invoicing has often been promoted most successfully on an industry basis. In more internationally competitive industries, this approach makes it easier to make the commercial case for e-invoicing and co-ordinate policies among major buyers.
- Engaging SMEs (especially small suppliers) in e-invoicing can be difficult, and few member states have been universally successful in this. Among the smallest businesses, awareness of e-invoicing is generally low. Engaging SMEs requires affordable solutions (possibly subsidised to some extent by buyers) which integrate easily with the ERP systems where possible but still allow some flexibility, especially with regard to manual inputs and human-readable or even paper outputs.
- Governments in a number of member states mandate e-invoicing for the public sector and such policies are generally credited with driving wholesale adoption. Less coercive methods, including government e-invoicing portals, are also common but are not as enthusiastically endorsed by stakeholders. Within public procurement PEPPOL is seen as an extremely promising initiative but one that has yet to realise its full potential.
- Electronic Data Interchange and digital signatures are very common methods of electronic invoicing throughout Europe. While in practice there are many different

¹³ This section has benefitted substantially from the insights of Nigel Taylor, Head of e-invoicing solutions at GXS and, at the time of writing, a UK representative at the EMSF, who helped produce a coherent narrative out of the various verbatim responses to the consultation. We are grateful for his support.

standards of e-invoice content in place across Europe, policymakers on the ground have demonstrated a strong preference for a single standard – this is especially true among early adopters. Still, it's important to appreciate that when pursued in isolation standardisation efforts can sometimes produce more, not fewer standards and needlessly complicate adoption.

This section attempts to summarise these suggested examples and categories the responses under service provider leadership, banking, industry vertical solutions, standards and guidelines, SME enablement and government policy.

Service Provider Leadership

Within certain geographic areas and different industry verticals, service providers have led the way in promoting the benefits of e-Invoicing. By providing innovative and cost-effective business models these companies have been removing paper from business-to-business (B2B) transactions for over 20 years.

The Nordics are often cited as leading the way in Europe: in Sweden, established providers CapGemini and Symbrio's IBX e-invoice platform is cited along with Pagero's SME approach, while in Denmark new service provider Tradeshift's 'free for suppliers' solution was also cited.

The United Kingdom has many examples of good practice in the B2B buyer-centric model where hundreds of multi-national and large corporates have automated their procurement and accounts payable, in many cases using a service provider: the OB10 model supporting over 100 buyers and over 100,000 suppliers is a reference. Bottomline Technologies was also cited as pioneering supplier based e-Invoicing and in supporting financial institutions and other service providers through SWIFT connectivity. In Austria, Online-Post (www.online-post.at), formerly Electronic Bill Presentment and Payment (EBPP) GmbH, was cited as supporting a successful business-to-consumer (B2C) e-Invoicing-model. Service providers that provide online dispute resolution was cited as an example of good practice in Cyprus.

Across Europe, GXS, a multi-national provider with substantial UK-based operations is cited as a leading exponent of good practice in electronic data interchange (EDI) and other B2B e-Invoicing models.

The UK Forum has noted that the ability of B2B buyer-centric solutions to drive adoption has benefited greatly from the initiative of service providers and in particular it will rely increasingly on interoperability between these as the market continues to mature, which will hopefully eliminate the need for suppliers to access multiple buyer channels. In addition to interoperability, conditions of success include the ability to make an economic case for volume based compliant e-invoicing; the creation of a proven on-boarding capability; and a good range of value added services and enhancements.

With regards to on-boarding, there is some dispute as to who should bear the costs – the Spanish Forum has suggested that such models work best when large buyers are willing to subsidise e-invoicing in order to ensure full adoption.

The Dutch Forum has pointed to the Consolidator model as an example of good practice, although it has also noted that deregulation has eroded its advantages in favour of online and offline invoicing applications.

Banks

Banks provide different services around electronic invoicing. These range from B2B, B2C and trade finance related products but there is a variation in the types of services offered and success rates across Europe. For example, within the Nordics sending e-Bills (complete with payment methods) to consumers for utilities, phone bills etc. is very popular while less so in the United Kingdom as there is widespread adoption of direct debit. The UK Forum has also noted that throughout Europe many billers require customers to enter their own portals where invoices are made available. Instead, the concept of an aggregation service (for example through banks) has proved to be popular in some countries and could be applied more widely.

In Denmark, banks' white-label B2B solutions are cited, as were B2C online services provided through banks in Sweden. In the United Kingdom, RBS was also cited for good practice in offering B2B services – RBS is supported by Fundtech, who also support other models.

In Austria, interfaces to the online-banking systems of Erste Bank und Sparkassen, Raiffeisen Bankengruppe and Unicredit Bank Austria, are seen as having contributed to the success of the Online Post service – run by the Austrian Postal Service.

Banks' online e-invoicing platforms are particularly well cited in Spain, including CaixaFactura, Sabadell Factura, eFactura Cajas, Factura Electrónica Bankia, Factura Integral BBVA, etc. Interestingly Spanish Banks were early innovators of payables factoring (supply chain finance) through 'confirming' and it is possible this has helped adoption. This is the only country in which respondents explicitly linked e-invoicing services provided by banks with their customers' access to finance. However, some respondents also noted that this is a service the banks provide only to customers who have their primary account with them and complained that the fees charged by banks and other service providers may provide them with a disincentive to offering higher value-added services.

Other countries have seen less involvement from the banks – most notably Poland, where the national Forum has noted the absence of banks as e-invoicing service providers.

Industry Vertical Solutions

There are many industry specific B2B solutions that have promoted the use of electronic invoicing, some are initiatives run/led by industry associations and others are private companies. These industry driven initiatives provoked the highest number of responses and citations of good practise.

Industry led solutions vary from online e-Procurement solutions to direct integration through EDI. GHX and OFS Portal are examples of electronic commerce industry focus in healthcare and Oil & Gas industries respectively. The German Automotive Industry Association (VDA) is a good example of a collective of interested parties implementing different electronic commerce initiatives.

In Sweden, the entire construction industry is signed up to a common portal for electronic invoicing run through the industry association - BEAst, while the Netherlands the construction, logistics and food industries each have their own EDI e-Invoicing networks which are provided by a relatively small amount of value added networks (VANs). The Netherlands health sector has achieved 90% adoption (around 28,000 organisations) through the VECOZO platform and in fact the Dutch Forum stressed the importance of sector-based initiatives as a successful means of driving adoption of e-invoicing.

On a different note, a national level registry of buyer preferences for receiving e-invoices has been established in Estonia, alongside awareness raising initiatives at the national level.

In the UK, examples of sector-specific and supply chain activities are Causeway in the construction industry and OFS Portal in the oil and gas industry, while GS1's support to retail/consumer packaged goods (CPG) supply chains was also cited.

In Germany the E-invoice Alliance (VeR)'s e-Invoicing service provider's association interoperability standard, unveiled in 2011, was cited and in Italy, the CBI (Customer to Business Interaction) consortium's interbank service for document management, as well as the DAFNE consortium for the pharmaceutical sector are cited.

In Spain iSIGMA was cited as good practice in the energy sector and in particular, the success of SIFE, an e-Invoicing interoperability initiative between banking electronic invoicing platforms is also cited. However, two business associations and even the Spanish Forum itself also noted that sector-based solutions have the potential to trap suppliers into expensive fee-based invoicing arrangements they cannot escape and that translating good practice from sectors that are early adopters to laggards is difficult, as the cost of building appropriate networks is substantial. Spanish respondents have also cited the acclaimed EdasFacturas product, prepared jointly by academics, chambers of commerce and government.

In Portugal, ACEPI (the Association of Electronic Commerce and Interactive Advertising) is cited as an example of good practice.

Eastern Europe is also seeing electronic invoice adoption proceed in this manner. In Slovakia, the retail and automotive sectors have led electronic invoicing through EDI, as has the retail sector in Poland, with an initiative focusing on large retailers which the national Forum highlighted as an example of good practice.

The Dutch Forum has raised an interesting point regarding the conditions for success of industry models, claiming that sectors exposed to competition and playing to the competitive advantages of individual countries may find it easier to implement such solutions. It is hard to corroborate this claim but it is definitely worth exploring – the Forum’s claim is that sector-wide cost pressures drive consensus in a way that other sectors cannot easily replicate.

Standards and Guidance

There are many various electronic invoicing standards that are EDI or XML based. They vary by industry or by country and are created by industry groups, standards organisations, governments, companies, etc. Examples of the variation of standards are the formats used by the Nemhandel, GS1, ODETTE, Edifice, PEPPOL, VDA and SWIFT organisations (amongst many others), each has its own unique invoice standard.

There have been varying initiatives to ‘standardise the standards’, CEN’s e-Invoicing workshops - Phases 1 through 3 (2006, 2009 and 2010 respectively) are cited as important developments producing crucial guidance on tax compliance, interoperability and e-Invoicing promotion & SME adoption.

CEN have also engaged in other electronic invoicing initiatives, CEN’s Workshop on Business Interoperability Interfaces on Public Procurement in Europe’ (CEN WS/BII Phases I and II), was established in 2007 ‘to provide a basic framework for technical interoperability in pan-European electronic transactions, expressed as a set of technical specification that cross refer to relevant activities, an in particular are compatible with UN/CEFACT in order to ensure global interoperability.’

In Denmark the ISO20022 and United Nations UN/CII standards are cited as examples of good practice, while some respondents from Finland advocate the four corner model within open markets for any service provider using open standard methods and formats. In Sweden, EANCOM, a set of guidelines developed by EDI users alongside GS1 based on UN/EDIFACT standard messages, is cited as an example. GS1’s standards system in manufacturing (esp. automotive) and retail was cited repeatedly.

National formats for invoicing were also cited, including Facturae in Spain, Finvoice in Finland and Nemhandel in Denmark. Such formats were seen as contributing to SME adoption of e-Invoicing in particular.

The UK Forum has suggested that, to date, the absence of format standards in the UK has not been an inhibitor to adoption and many services exist to manage and convert

formats into the structured format required by the parties. However, they feel that the development of a commonly used format for a generally used core invoice could enhance interoperability between service providers operating in a networked model, and such a standard would most likely find adoption at the end-user level subject to the evolution and change cycles for legacy ERP systems. The Polish Forum felt even more strongly that standardisation and common standards of invoice content internationally were key to unlocking the potential of e-invoicing, as long as they are well publicised and widely applicable.

The Dutch Forum, on the other hand, is more cautious towards standards and feels that some service providers have a vested interest in the proliferation of standards or may be forced by their own overlapping user networks to adopt common standards in a manner that is not in the best interests of end users.

Empowering SMEs and small suppliers

In order to gain critical adoption of electronic invoicing it is thought that the ‘mass-middle’ of small and medium enterprise companies must begin invoicing electronically. SMEs have not adopted B2B integration en masse due to the relative complexity of, for example, implementing an EDI program, or the additional workload generated by submitting invoices through web portal solutions. In some countries (e.g. Spain, Romania) awareness among SMEs is relatively low and depends entirely on the backgrounds of owner-managers and their advisers as most buyers are reluctant to mandate e-invoicing. As a result, implementation is slow and uneven. In others, such as Poland, SMEs are still strongly resistant to any e-invoicing solutions that involve a cost to themselves, suggesting the business case is still unproven, and do not feel that compliance is guaranteed.

There are notable exceptions to this: the Dutch Forum, for instance, pointed to the proliferation and runaway success of online billing platforms, facilitated by suppliers directly or service providers, which they claim achieved near-complete adoption rates in a fortnight.

Overall, however, it is thought that to truly crack this market integration with SME Enterprise Resource Planning (ERP) and accountancy solutions is required. These applications must be able send and receive electronic invoices without interfering with a company’s accounts payable and receivable processes. To be successful in the SME market the applications must integrate with a range of solutions from providers such as Oracle or SAP, through to Sage or Exchequer. These applications must be easy to install, cost effective and work seamlessly.

Ironically, the potential for integration might be greater among SMEs as they use similar (often standard) and relatively simple financial software and a few major providers will tend to have a large share of the market. All of their products can, in principle, output

invoices in non-paper form and so these companies could prove to be important partners in promoting e-invoicing among SMEs.

The Dutch Forum corroborates this, claiming that 100% integration should be possible, not just in theory but in practice, and suggesting that this should be the new frontier of e-invoicing adoption, as opposed to standards, which are more commonly discussed. One respondent from Romania took a more measured approach, suggesting that ERP integration should be possible to a very great extent, but should allow for the manual treatment of exceptions in order to become a reality. Banks need to consider a similar case for integration in many countries, with Spain perhaps the most appropriate example: here, however, the National Forum explained that the key to full integration among SMEs was keeping the number of platforms SMEs needed to access to a minimum, when in fact banks, and many service providers, have an incentive to maintain their own proprietary systems.

In Sweden, an increasing number of ERP providers are building in functionality for electronic commerce based on EDI standards, including UN/EDIFACT and XML. In Denmark, ERP providers are seen as powerful partners but not proactive ones as these companies tend to not develop functionality until a critical mass in market has been achieved.

In a number of countries, the dual-delivery (paper and electronic) approach (e.g. flexdoc) is seen as successful, especially with regards to SMEs, as purely electronic delivery is still not sufficiently widespread. However in some countries this is not allowed by the tax authorities.

In Austria, integration of e-Invoicing as an additional module of ERP systems is seen as useful and is claimed to help control implementation costs for businesses, while in France and the Netherlands, use of PDF invoices by SMEs in particular has been encouraged by the development of 'killer apps' such as email integration and free PDF virtual printers that provide XML output. The UK Forum also noted that use of PDFs is well established as an element of what is regarded by many SMEs as e-Invoicing. In many cases, of course, it is nothing of the sort: the PDF is simply printed following transmission and the electronic attachment deleted.

Government policy

Increasingly governments are thinking of mandating electronic procurement and invoicing processes, either to capture cost savings as part of an austerity program or to capture tax revenue by combatting the 'grey economy'. There are several different initiatives from Nemhandel in Denmark and Digipoort in the Netherlands, which are government mandated infrastructures, through to the Irish governments PEPPOL Pilot project. The Pan-European Procurement Portal Online project (PEPPOL) was initially aimed at joining up European government procurement hubs, but has widened its remit

to include electronic invoicing.

PEPPOL and PEPPOL pilots at the national level are cited by a number of respondents across Europe as examples of good practice. One respondent noted that PEPPOL will need to be complemented with easy to implement standards, clear process definitions, accessible tools and/or service providers. The respondent went on to state that success would depend on the member states' will to mandate B2G invoicing. The UK offers a good example of this as interest in PEPPOL has been a lot stronger in Scotland under the devolved powers of the national government than in the rest of the country.

Mandating e-Invoicing for the public sector is a frequent recommendation of best practice. In Denmark, mandatory use of e-Invoicing in the public sector is seen as contributing to the country's solid record on adoption by both Danish and foreign respondents. Similarly, in Sweden, the public sector has been an early adopter of standardised electronic processes and the Regional Health Care area of the Västra Götalandsregionen (VGR) in western Sweden is also cited. Finland's public invoicing portal for SME's is cited, as is (repeatedly) the European Commission's e-procurement platform, ePrior. As a rule though, it appears that such portals were more popular among stakeholders where they had a regional reach.

In Spain, B2G hub initiatives and e-Invoicing portals run by local Administrations are seen as effective. E.FACT for the Catalonia Public Administration, Gfactura for the Valencia Public Administration and SEF for the Galicia Public Administration and the future nationwide hub for Central Government are all cited. Portugal's National Association for Public Procurement (ANCP) is seen as a good example of policy due to its mandate of promoting SME access to procurement.

In Austria the E-Invoicing awareness and support initiative launched by the Federal Austrian Economic Chamber is cited and a government procurement portal is planned for 2013, which is expected to contribute significantly to adoption. In Cyprus, including e-Invoicing in the government's Better Regulation / Regulatory reform agenda is cited as a positive step. The new e-invoice regulations in Poland and the implementation pilots carried out with the tax authorities are perceived as a positive step.

While the political will to implement e-invoicing is a significant contributor to such initiatives in the public sector, and is likely to be strengthened as more member states come under pressure to explore efficiencies in government, there are also possible obstacles. The UK Forum in particular noted that public sector buyers in the country do not always understand the concept of e-invoicing as separate from e-procurement, which is much more complex and can require major changes to internal systems, and are needlessly discouraged as a result.

Finally, while not all countries may have examples of good practice by public authorities, they should still draw inspiration from precedents in electronic information

exchange in other areas: in Poland for instance, the National Forum pointed to the roll out of electronic submission for social insurance, income tax and customs declarations as precedents policymakers should be encouraged to build on.

PART 6: CONCLUSIONS

This report provides an interesting first assessment of the state of play in the EU member states which ACCA hopes will assist the EMSF in its work. That said, it is important not to read into our findings conclusions that they cannot support. At this early stage, the consultation suffers from significant limitations including

- a small sample, especially in terms of analytical qualitative responses
- incomplete coverage of the EU member states
- a significant quantitative element which cannot alone capture the detail of good practice

Fortunately, the EMSF Activity Group on good practices is complementing the findings of the consultation with substantial qualitative work on successful adoption models and will be able to deliver much more valuable insights in time, including concrete recommendations. For now, the following conclusions can be drawn from the evidence at hand.

First, stakeholders and experts have made it clear that it is not specific policies, products or processes that constitute good practice. Good practice is about changing behaviour and must be seen in context – it will therefore vary by each country's current level of uptake and the reasons behind it. This means that a qualified approach to good practice will need to inform the EMSF's work in the coming year.

It is clear that public policy is a very significant – probably the most significant – driver of the uptake of e-invoicing. The member states enjoying the highest levels of uptake in Europe, regardless of how this is measured, have almost universally mandated e-invoicing at least in their own procurement. They all have policy frameworks and guidance in place aiming to remove uncertainty about compliance and many have developed national e-invoicing standards.

Furthermore, we have documented the important role of service providers, who have led the agenda throughout Europe for years and whose contribution is particularly critical when it comes to engaging small and medium sized suppliers. Their role is complementary to public policy and becomes more important where governments have been unwilling or unable to support e-invoicing.

There are many good reasons why engaging SMEs is more challenging. Adoption of e-invoicing is a much more straightforward commercial decision among major corporates, but has substantial behavioural aspects when it comes to SMEs. Awareness, IT competency and financial resources as well as the balance of power vis-à-vis customers and suppliers all complicate the decisions of smaller businesses. On the other hand, service providers and governments in some member states have developed very good means of engaging SMEs, so the potential is there. For some segments of the SME population, adoption of e-invoicing seems to require a cross-subsidy from either customers, service providers or governments.

For the same reasons, our findings suggest that simply making the commercial case for e-invoicing (as many awareness campaigns try to do) will not work as well as expected for most businesses. Still, it is worth noting how little attention the link between better invoicing and better access to finance has received, when in fact this could strengthen the commercial case for cash-poor smaller businesses very substantially.

When it comes to engaging businesses regardless of size it appears that a sector-based approach yields significant benefits as it makes it easier to co-ordinate buyers' policies and make the commercial case for e-invoicing. Some of the earliest and best examples of good practice around Europe involve sector-based initiatives.

While our examination into the role of banks has been limited by methodological issues, it is clear that in some member states the banks have either not engaged in the e-invoicing agenda or focused for the most part on e-billing and B2C payments. The potential for banks to do more is substantial due to their role in facilitating payments and, where they have been proactive and offered affordable services, stakeholders are quick to cite them as champions of good practice.

New initiatives and methods of delivery show substantial promise. Most stakeholders and experts contributing to this study believe in the potential for PEPPOL to drive cross-border e-invoicing through public procurement. Others point to the success of cloud-based and online platforms, public or private, which have proliferated in some member states in recent years. Others still point to ever fuller integration with the ERP systems of businesses, especially SMEs, as the new frontier for e-invoicing uptake.

ANNEX A: CONSULTATION RESPONSES

Table A1: General adoption models by average rating		
Models	Mean	Median
B2B Buyer-driven supply chain model at national level - Supported by a service provider	3.38	4.00
B2B EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/documents - Supported by a service provider	3.20	3.00
Integration of invoicing and ERP systems of businesses	3.11	3.00
Total invoice management model where a service provider processes all invoices in paper and in electronic form on behalf of a trading party (whether for suppliers or buyers)	2.88	3.00
B2B Buyer-driven supply chain model at multi-country/cross-border level - Supported by a service provider	2.83	3.00
B2B Supplier driven model at either national or international level in which suppliers send or make available invoices as part of the accounts receivable process - Supported by a service provider	2.81	3.00
B2C e-billing model where larger billers send or make available e-invoices to consumers/SME's via portals, email, Internet banking or by other means - Supported by a service provider	2.78	3.00
Marketplaces/ Hubs where participants in an electronic market place or special purpose hub send/ receive e-invoices as part of the service	2.58	2.00
B2G public procurement model at national level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Supported by a service provider	2.46	2.00
B2C e-billing model where larger billers send or make available e-invoices to consumers/SME's via portals, email, Internet banking or by other means - Not supported by a service provider	2.38	2.00
B2B Buyer-driven supply chain model at national level - Not supported by a service provider	2.38	2.00
B2B Supplier driven model at either national or international level in which suppliers send or make available invoices as part of the accounts receivable process - Not supported by a service provider	2.33	2.00
Bank- or Payments Service Provider-led models for billing and / or invoicing*	2.30	2.00
B2B Self-billing model where a larger buyer creates an e-invoice on behalf of the supplier and administers the process - Supported by a service provider	2.26	2.00
B2G public procurement model at cross-border level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Supported by a service provider	2.14	2.00
B2B EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/documents - Not supported by a service provider	1.95	2.00
B2B Self-billing model where a larger buyer creates an e-invoice on behalf of the supplier and administers the process - Not supported by a service provider	1.93	2.00
B2B Buyer-driven supply chain model at multi-country/cross-border level - Not supported by a service provider	1.90	2.00
B2G public procurement model at national level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Not supported by a service provider	1.83	1.00
B2G public procurement model at cross-border level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Not supported by a service provider	1.78	2.00

Note: Because ratings were coded '0' if respondents didn't have enough experience of individual models due to insufficient uptake or any other reason, mean ratings can be misleading. A median rating is also provided which is less affected by extreme values. The results are, in any case, similar.
 * Due to a technical fault, the question regarding Bank- and Payment Provider- driven models was omitted from early versions of the online survey – this means that the figures cited here are based on a very small sample and should not be seen as indicative.

Table A2: General adoption drivers – average ratings (1=least helpful; 5 = most helpful)

Models	Mean	Median
Buyers mandating e-invoicing or making it compulsory as part of a trading relationship	4.10	4.00
Inter-connection or interoperability between service providers	3.95	4.00
The availability of tools and techniques (either as a package or as components) to provide compliant e-invoicing including electronic signatures, EDI, or other means, including support for business controls as provided for in the new VAT Directive (2010)	3.75	4.00
Existence of an easy to use identification and addressing system domestically	3.70	4.00
The ability of business models to on-board large numbers of trading parties with ease and speed	3.70	4.00
Existence of an easy to use identification and addressing system globally or at the EU-level	3.58	4.00
The parallel provision of PDFs where structured information is handled	3.37	4.00
Cloud-based accessibility of e-invoicing platforms	3.33	3.00
Integration of the end-to-end “procurement to pay process” as opposed to a modular approach	3.30	3.00
The use of document images (e.g. PDFs)	3.04	3.00
Creation of shared service centres	2.73	2.00
“Opt-in” and “Opt-out” models, where trading parties are allowed to either opt in or out of an operating model	2.54	2.00
Note: Because ratings were coded '0' if respondents didn't have enough experience of individual drivers due to insufficient uptake or any other reason, mean ratings can be misleading. A median rating is also provided which is less affected by extreme values. The results are, in any case, similar.		

Table A3: SME adoption models by average rating (1=least helpful; 5 = most helpful)

Models	Mean	Median
B2b Buyer-driven supply chain model at national level, in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process (b=SME) - Supported by a service provider	3.30	4.00
B2C/b e-billing model where larger billers send or make available e-invoices to SMEs via portals, email, Internet banking or by other means - Supported by a service provider	3.10	3.00
Integration of invoicing and ERP systems	3.02	3.00
B2b EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/ documents - Supported by a service provider	2.74	3.00
Total invoice management model where a service provider processes all invoices in paper and in electronic form on behalf of a trading party (whether for suppliers or buyers)	2.72	3.00
B2C/b e-billing model where larger billers send or make available e-invoices to SMEs via portals, email, Internet banking or by other means - Not supported by a service provider	2.64	2.00
b2B Supplier driven model at either national or international level in which suppliers send or make available invoices as part of the accounts receivable process - Supported by a service provider	2.62	2.00
Marketplaces/ Hubs where participants in an electronic market place or special purpose hub send/ receive e-invoices as part of the service	2.56	2.00
B2b Buyer-driven supply chain model at multi-country/ cross-border level in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process - Supported by a service provider	2.53	2.00
b2G public procurement model at national level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Supported by a service provider	2.52	2.00

SME Peer to Peer (b2b) model, using either PDF or structured data - Supported by a service provider	2.41	2.00
Bank- or Payments Service Provider-led models for billing and / or invoicing*	2.40	2.00
b2G public procurement model at cross-border level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Supported by a service provider	2.28	2.00
B2b Buyer-driven supply chain model at national level, in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process (b=SME) - Not supported by a service provider	2.27	2.00
B2b Self-billing model where a buyer creates an e-invoice on behalf of the supplier and administers the process - Supported by a service provider	2.27	2.00
SME Peer to Peer (b2b) model, using either PDF or structured data - Not supported by a service provider	2.23	2.00
b2B Supplier driven model at either national or international level in which suppliers send or make available invoices as part of the accounts receivable process - Not supported by a service provider	2.19	2.00
B2b Self-billing model where a buyer creates an e-invoice on behalf of the supplier and administers the process - Not supported by a service provider	2.05	2.00
b2G public procurement model at cross-border level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Not supported by a service provider	1.98	2.00
b2G public procurement model at national level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Not supported by a service provider	1.94	1.00
B2b EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/ documents - Not supported by a service provider	1.85	2.00
B2b Buyer-driven supply chain model at multi-country/ cross-border level in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process - Not supported by a service provider	1.81	1.00
<p>Note: Because ratings were coded '0' if respondents didn't have enough experience of individual models due to insufficient uptake or any other reason, mean ratings can be misleading. A median rating is also provided which is less affected by extreme values. The results are, in any case, similar.</p> <p>* Due to a technical fault, the question regarding Bank- and Payment Provider- driven models was omitted from early versions of the online survey – this means that the figures cited here are based on a very small sample and should not be seen as indicative.</p>		

ANNEX B: Interpretation of the factor analysis outputs.

The following table describes the results of the factor analysis used to identify individual adoption drivers in Section 3. Questions (rows) are assumed to be positively associated with the respective drivers if the loading derived from the analysis is over .5, and negatively if the loading is less than -.5

Table B1: Adoption drivers - results of the factor analysis	
1. Service providers	Loadings
B2B Supplier driven model at either national or international level in which suppliers send or make available invoices as part of the accounts receivable process - Supported by a service provider	.820
b2B Supplier driven model at either national or international level in which suppliers send or make available invoices as part of the accounts receivable process - Supported by a service provider	.765
B2b Buyer-driven supply chain model at multi-country/ cross-border level in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process - Supported by a service provider	.719
Total invoice management model where a service provider processes all invoices in paper and in electronic form on behalf of a trading party (whether for suppliers or buyers)	.694
B2B Buyer-driven supply chain model at national level - Supported by a service provider	.691
B2b Buyer-driven supply chain model at national level, in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process (b=SME) - Supported by a service provider	.665
Total invoice management model where a service provider processes all invoices in paper and in electronic form on behalf of a trading party (whether for suppliers or buyers)	.658
B2B Buyer-driven supply chain model at multi-country/cross-border level - Supported by a service provider	.594
Marketplaces/ Hubs where participants in an electronic market place or special purpose hub send/ receive e-invoices as part of the service	.561
B2b Self-billing model where a buyer creates an e-invoice on behalf of the supplier and administers the process - Supported by a service provider	.525
2. Government policy	Loadings
Government has set an example by adopting e-invoicing widely in its own procurement	.852
My country has been a leader in Europe in setting up a policy framework/ public sector solution that encourages e-invoicing	.833
It is the public sector, rather than the private sector, that leads the e-invoicing agenda in this country	.777
Integration of invoicing and ERP systems of businesses	.547
Access to the public procurement market	.528

3. SME certainty offering	Loadings
Integration with SMEs? accounting software	.766
Bank solutions specifically aimed at SMEs	.668
A common national standard for invoice content	.666
Affordability	.625
A common EU standard for invoice content	.618
Information and awareness campaigns targeting SMEs	.609
Service provider solutions specifically aimed at SMEs	.553
4. Cross-border government procurement (e.g. PEPPOL)	Loadings
b2G public procurement model at cross-border level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Not supported by a service provider	.816
b2G public procurement model at cross-border level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Supported by a service provider	.768
B2G public procurement model at cross-border level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Not supported by a service provider	.739
B2G public procurement model at cross-border level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers - Supported by a service provider	.651
5. Unmediated	Loadings
B2b Buyer-driven supply chain model at national level, in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process (b=SME) - Not supported by a service provider	.752
B2B EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/documents - Not supported by a service provider	.742
B2B Buyer-driven supply chain model at national level - Not supported by a service provider	.670
B2b Buyer-driven supply chain model at multi-country/ cross-border level in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process - Not supported by a service provider	.663
B2B Buyer-driven supply chain model at multi-country/cross-border level - Not supported by a service provider	.617
b2B Supplier driven model at either national or international level in which suppliers send or make available invoices as part of the accounts receivable process - Not supported by a service provider	.536
B2b EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/ documents - Not supported by a service provider	.517

6. Strong commercial case	Loadings
Access to international markets	.762
Process efficiencies and cost savings	.662
Access to finance	.634
Access to corporate supply chains in the private sector	.632
Financial control/ auditability	.601
Compliance with VAT rules and regulation	.598
7. e-billing	Loadings
B2B Self-billing model where a larger buyer creates an e-invoice on behalf of the supplier and administers the process - Supported by a service provider	.578
B2C e-billing model where larger billers send or make available e-invoices to consumers/SME's via portals, email, Internet banking or by other means - Not supported by a service provider	.781
B2C/b e-billing model where larger billers send or make available e-invoices to SMEs via portals, email, Internet banking or by other means - Not supported by a service provider	.561
8. EDI	Loadings
B2B EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/documents - Supported by a service provider	.771
B2b EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/ documents - Supported by a service provider	.662
9. VAT compliance	Loadings
Peace of mind on VAT compliance	.778
The parallel provision of PDFs where structured information is handled	.656
10. Interoperability	Loadings
Existence of an easy to use identification and addressing system domestically	.811
Inter-connection or interoperability between service providers	.733
Existence of an easy to use identification and addressing system globally or at the EU-level	.597
11. Government awareness campaigns	Loadings
Government has initiatives in place aiming to increase awareness of e-invoicing among businesses	.821

ANNEX C: CHAID ANALYSIS OF ADOPTION DRIVERS

Figure C.1: Small business adoption drivers

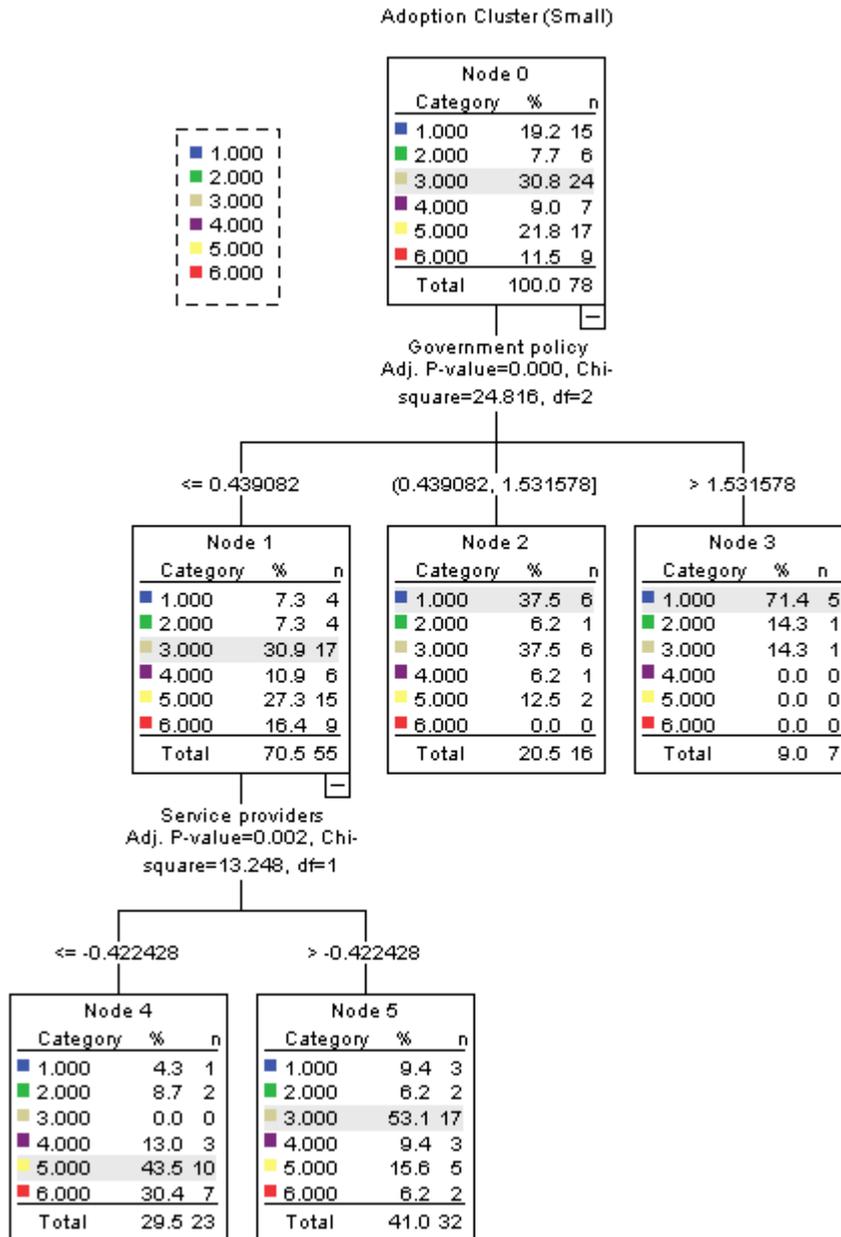


Figure C.2: Medium sized business adoption drivers

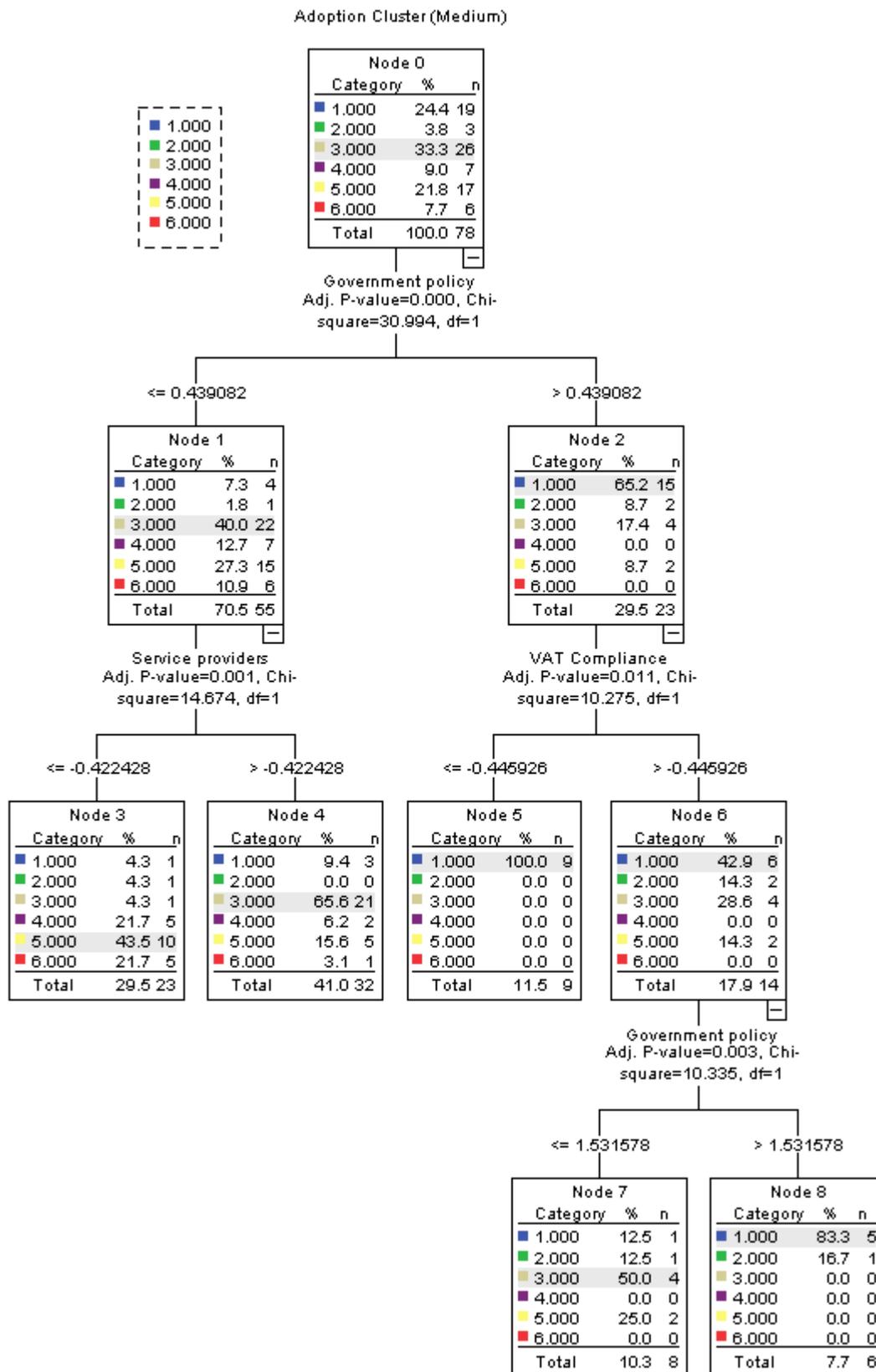
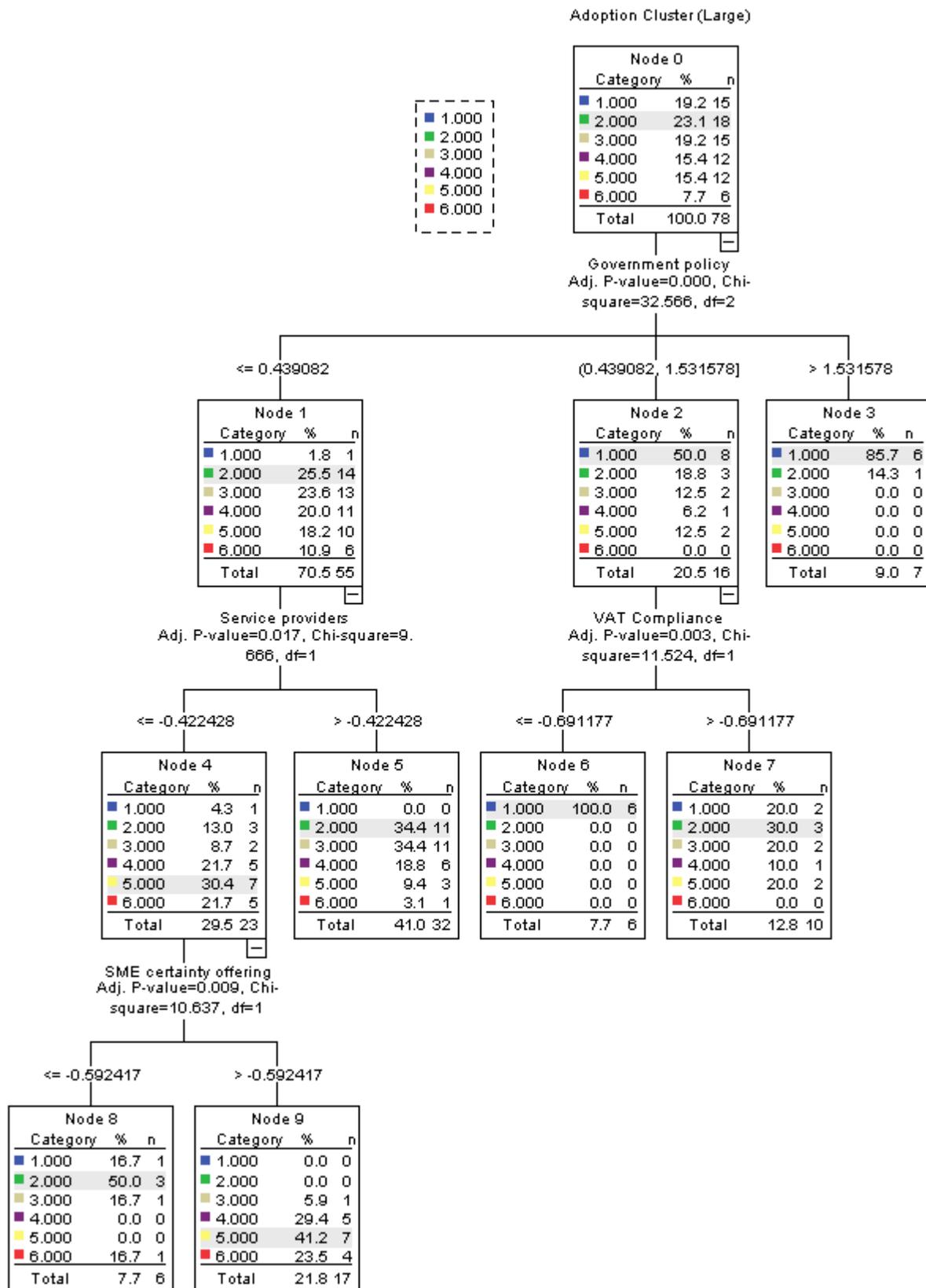


Figure C.3: Large business adoption drivers



ANNEX D: CONSULTATION GUIDANCE AND QUESTIONNAIRES

EU MULTI-STAKEHOLDER FORUM ON ELECTRONIC INVOICING

ACTIVITY GROUP 2: EXCHANGE OF EXPERIENCE AND GOOD PRACTICES

GUIDANCE NOTES FOR RESPONDING TO THE CONSULTATION

This consultation, including an [online survey](#) and a [consultation document](#), is addressed to members of the EU Multi-Stakeholder Forum on e-Invoicing (EMSF), the national multi-stakeholder forums and selected experts in the field.

Its immediate purpose is to gather a body of expert views about the current development of experience and good practice for e-invoicing in the European Union. The intention is to identify the necessary conditions for success in promoting the use of electronic invoicing and to highlight a number of case studies in which these conditions are demonstrated.

Such cases will provide invaluable input into the learning process for all stakeholders and support the clear policy objectives in support of e-invoicing adoption at European and Member State level.

It is expected that the EMSF members representing each Member State will provide a single, collective response on behalf of their respective National Forums. Other members of the EMSF representing business associations or other collectives are expected to each offer a single, collective response on behalf of their constituency. That said, other responses, representing the views of an enterprise, organisation, association or individual (including individual Forum members), are also very welcome and it is within the discretion of the National Forums to arrange for and invite such additional input.

Although this consultation does not intend to capture statistical evidence on adoption, responses should still be fact-based and record good practice as it has actually developed. If you wish, you may elaborate on the evidence and provide supporting documentation in the more detailed, qualitative part of the consultation, available [here](#).

This consultation is primarily focused on good practices that relate to operating models: for example, services provided by service providers, other solutions of various kinds, market initiatives, collective schemes, and public sector policies and initiatives. These operating models are actor-specific, focusing on market participants (large buyers, SMEs, government, consumers) who make a key contribution to increasing adoption and also method-specific (buyer-driven, supplier-driven, EDI model, self-billing, e-billing,

public procurement model, Bank/Payment service provider, Integration of ERP systems, Marketplace/Hubs) or a combination thereof.

It is essential that good practices are identified that have proven to favour the uptake of e-invoicing both at the national level and at the international/ cross-border level within Europe (and by extension globally).

The consultation is not at this stage concerned with good practices in relation to the management of e-invoicing projects at the level of the individual enterprise. Additionally, the questionnaire does not focus on the definition of good practice for VAT or legal compliance by taxpayers whether at national or cross-border level. Instead, other activity groups will study these latter issues and it will be possible to integrate their findings into the survey of good practices before the Good Practices Activity group reports in September 2012.

If you have any further questions on the two consultation instruments or the process in general, please do not hesitate to contact the activity leaders:

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Emmanouil Schizas: emmanouil.schizas@accaglobal.com

EU MULTI-STAKEHOLDER FORUM ON ELECTRONIC INVOICING

ACTIVITY GROUP 2: EXCHANGE OF EXPERIENCE AND GOOD PRACTICES

ABOUT THE RESPONDENT

Q1. Which country are you based in?

—

Q2. Which of the following would best describe the organisation you work for/represent?

National Forum (response on behalf of the entire Forum)

Bank or Banking Association

Business / Employer Association

Consumer / User Advocacy Group

Consultant or academic researcher

- Department / Ministry / Government agency for Industry, Business or Enterprise Development, Technology or Innovation or Government standard-setting body
- Department / Ministry responsible for interior affairs, regulatory reform or public sector reform
- e-invoicing service or solution provider
- e-Procurement / e-commerce / B2B solution provider
- Financial regulator
- Government purchasing / procurement authority
- Individual responding in private capacity
- Individual business (Large – 250 or more employees)
- Individual business (craft or SME – less than 250 employees)
- Professional body or private standard-setting body
- Tax or revenue authority, Treasury Department or Ministry of Finance

What is the name of your organisation?

DEFINING GOOD PRACTICE

Q3. Please consider the following definition of e-invoicing.

Electronic invoices are defined as ‘invoices that have been issued and received in electronic format. This includes structured e-invoices that are transmitted, processed and archived fully electronically from end to end throughout their life-cycle and unstructured e-invoices, for example in .pdf format. In any case, invoices must be tax-compliant.

Do you consider this definition to be comprehensive? Please comment.

Q4. Please consider the following definition of good practice

‘simply doing things that are shown to work or be effective and that conform to applicable commercial and legal governance’?

Do you have any comments on this definition of good practice in the context of promoting the use of e-invoicing?

E-INVOICING OPERATING MODELS SUPPORTED BY SERVICE PROVIDERS (INCLUDING BANKS) OR CONDUCTED DIRECTLY BETWEEN TRADING PARTIES

Q5. On a scale of 1 (disagree completely) to 5 (agree completely), to what extent would you say you agree that the following models have contributed to the adoption of e-invoicing generally in your country? Please consider adoption in terms of the share of transactions conducted in this way and the numbers of organisations adopting such methods.

	Don't know or N/A	1 Disagree completely	2	3	4	5 Agree completely
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5.1 B2B Buyer-driven supply chain model at national level, in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process

5.1.a Not supported by a service provider

5.1.b Supported by a service provider

5.2 B2B Buyer-driven supply chain model at multi-country/cross-border level in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process

5.2.a Not supported by a service provider

5.2.b Supported by a service provider

5.3 B2B Supplier driven model at either national or international level in which suppliers send or make available invoices as part of the accounts receivable process.

5.3.a Not supported by a service provider

5.3.b Supported by a service provider

5.4 B2B EDI model where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/documents

5.4.a Not supported by a service provider

5.4.b Supported by a service provider

5.5 B2B Self-billing model where a larger buyer creates an e-invoice on behalf of the supplier and administers the process

5.5.a Not supported by a service provider

5.5.b Supported by a service provider

5.6 B2G public procurement model at national level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers

5.6.a Not supported by a service provider

5.6.b Supported by a service provider

5.7 B2G public procurement model at cross-border level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers

5.7.a Not supported by a service provider

5.7.b Supported by a service provider

5.8 B2C e-billing model where larger billers send or make available e-invoices to consumers/SME's via portals, email, Internet banking or by other means

5.8a Not supported by a service provider

5.8b Supported by a service provider

5.9.a Bank or Payment Service Provider models

5.9.b Marketplaces/Hubs where participants in an electronic market place or special purpose hub send/receive e-invoices as part of the service

5.9.c Integration of invoicing and ERP systems of businesses

5.9.d Total invoice management model where a service provider processes all invoices in paper and in electronic form on behalf of a trading party (whether for suppliers or buyers)

Q6. Please rate the importance of each of the following operating models to the wide adoption of e-invoicing, on a scale of 1-5 (where 1 = not at all important and 5 = extremely important).

	Don't know or N/A	1 Not at all important	2	3	4	5 Extremely important
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6.1 Buyers mandating e-invoicing or making it compulsory as part of a trading relationship

6.2 'Opt-in' and 'Opt-out' models, where trading parties are allowed to either opt in or out of an operating model

6.3 Inter-connection or interoperability between service providers.

6.4 Existence of an easy to use identification and addressing system domestically

6.5 Existence of an easy to use identification and addressing system globally or at the EU-level.

6.6 Creation of shared service centres

6.7 The availability of tools and techniques (either as a package or as components) to provide compliant e-invoicing including electronic signatures, EDI, or other means, including support for business controls as provided for in the new VAT Directive (2010/45/EU)

6.8 The use of document images (e.g. PDFs)

6.9 The parallel provision of PDF's where structured information is handled

6.10 The ability of business models to on-board large numbers of trading parties with ease and speed

6.11 Integration of the end-to-end 'procurement to pay process' as opposed to a modular approach

6.12 Cloud-based accessibility of e-invoicing platforms

Q7. Could you please name a few (no more than 3) initiatives or solutions that you believe represent good practice in promoting the wide adoption of electronic invoicing? You do not need to provide details at this stage, just the name of the service/product/initiative that you have in mind so that we can identify it for further research.

INITIATIVES TARGETED AT SMALL AND MEDIUM SIZED ENTERPRISES (SMES)

Q8. On a scale of 1 (disagree completely) to 5 (agree completely), to what extent would you say you agree that the following models have contributed to the adoption of e-invoicing by SMEs in your country? Please consider adoption in terms of the share of transactions conducted in this way and the numbers of SMEs adopting such methods.

	Don't know or N/A	1 Disagree completely	2	3	4	5 Agree completely
8.1 B2b <u>Buyer-driven</u> supply chain model at <u>national</u> level, in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process (b=SME)						

8.1.a Not supported by a service provider

8.1.b Supported by a service provider

8.2 B2b <u>Buyer-driven</u> supply chain model at <u>multi-country/cross-border</u> level in which larger buyers recruit or mandate e-invoicing for suppliers as part of the accounts payable process						
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8.2.a Not supported by a service provider

8.2.b Supported by a service provider

8.3 b2B <u>Supplier driven</u> model at either national or international level in which suppliers send or make available invoices as						
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part of the accounts receivable process.						
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8.3.a Not supported by a service provider

8.3.b Supported by a service provider

<u>8.4 B2b EDI model</u> where multiple trading parties are interconnected either through a Value Added Network or a secure point to point link for the exchange of structured supply chain data/documents						
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8.4.a Not supported by a service provider

8.4.b Supported by a service provider

<u>8.5 B2b Self-billing model</u> where a buyer creates an e-invoice on behalf of the supplier and administers the process						
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8.5.a Not supported by a service provider

8.5.b Supported by a service provider

<u>8.6 b2G public procurement model</u> at national level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers						
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8.6.a Not supported by a service provider

8.6.b Supported by a service provider

<u>8.7 b2G public procurement model</u> at cross-border level where a public agency organizes a public procurement process (within a defined scope) and recruits or mandates adoption by suppliers						
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8.7.a Not supported by a service provider

8.7.b Supported by a service provider

<u>8.8 SME Peer to Peer (b2b) model</u> , using either PDF or structured data						
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8.8.a Not supported by a service provider

8.8.b Supported by a service provider

8.9 B2C/b e-billing model where larger billers send or make available e-invoices to SMEs via portals, email, Internet banking or by other means						
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8.9.a Not supported by a service provider

8.9.b Supported by a service provider

8.10.a Bank or Payment Service Provider models

8.10.b Marketplaces/Hubs where participants in an electronic market place or special purpose hub send/receive e-invoices as part of the service

8.10.c Integration of invoicing and ERP systems

8.10.d Total invoice management model where a service provider processes all invoices in paper and in electronic form on behalf of a trading party (whether for suppliers or buyers)

Q9. Please rate the following measures in terms of operating models that have encouraged or demonstrated the potential to encourage e-invoicing adoption by SMEs?

	Don't know or N/A	1 Not at all helpful	2	3	4	5 Very helpful
9.1 Little or no in-house IT resource necessary						
9.2 A common national standard for invoice content						
9.3 A common EU standard for invoice content						
9.4 Publicly available platform provided by the government						
9.5 Service provider solutions specifically aimed at SMEs						
9.6 Bank solutions specifically aimed at SMEs						

9.7 Integration with SMEs' accounting software						
9.8 Peace of mind on VAT compliance						
9.9 Affordability						
9.10 Information and awareness campaigns targeting SMEs						

Q10. Could you please name a few (no more than 3) initiatives or solutions that you believe represent good practice in promoting the wide adoption of electronic invoicing by SMEs? You do not need to provide details at this stage, just the name of the service/product/initiative that you have in mind so that we can identify it for further research.

THE ROLE OF GOVERNMENT AND THE PUBLIC SECTOR

Q11. On a scale of 1 (disagree completely) to 5 (agree completely), to what extent do you agree with the following statements regarding the attitudes of the public sector and policymakers towards e-invoicing?

	Don't know or N/A	1 Disagree completely	2	3	4	5 Agree completely
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11.1 Good practices are the same whether it's private or public sector purchasing we're talking about

11.2 It is the public sector, rather than the

private sector, that leads the e-invoicing agenda in this country

11.3 Policymakers in this country rely substantially on the expertise of service and solution providers when discussing e-invoicing

11.4 My country has been a leader in Europe in setting up a policy framework/ public sector solution that encourages e-invoicing

11.5 Government has set an example by adopting e-invoicing widely in its own procurement

11.6 Government supports a single standard or a very small number of standards to the exclusion of all others

11.7 When it comes to the e-invoicing agenda; the initiative in this country is expected to usually come from the EU

11.8 Policymakers would rather support an inferior solution (either technically or as a business proposition) if it showed signs of becoming popular very quickly

11.9 Government has initiatives in place aiming to increase awareness of e-invoicing among businesses

Q12. Could you please name a few (no more than 3) initiatives or solutions that you believe represent good practice in promoting the wide adoption of electronic invoicing in public procurement or by government suppliers? You do not need to provide details at this stage, just the name of the service/product/initiative that you have in mind so that we can identify it for further research.

SECTION G: DRIVING ADOPTION

Q13. On a scale of 1 (disagree completely) to 5 (agree completely), to what extent would you say that each of the following arguments has been crucial to the adoption of e-invoicing in your country over the last 5 years?

	Don't know or N/A	1 Disagree completely	2	3	4	5 Agree completely
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13.1 Access to corporate supply chains in the private sector

13.2 Access to international markets

13.3 Access to finance

13.4 Access to the public procurement market

13.5 Prompt payment

13.6 Environmental benefits / saving on paper etc.

13.7 Compliance with VAT rules and regulation

13.8 Process efficiencies and cost savings

13.9 Financial control/auditability

EU MULTI-STAKEHOLDER FORUM ON ELECTRONIC INVOICING

ACTIVITY GROUP 2: EXCHANGE OF EXPERIENCE AND GOOD PRACTICES

CONSULTATION TO SUPPORT A BENCHMARKING EXERCISE

PART II: QUALITATIVE STUDY

Note: There are two parts to this consultation – a quantitative online survey on the drivers of adoption of e-invoicing (available [here](#)) and this supplementary consultation document, in which you may, if you wish, discuss your views and experiences in more detail, in order to help the Activity Working Group identify good practices and understand how they work on the ground.

Before taking the survey or responding to this consultation document, please read the guidance notes that can be found [here](#). *This stage of the consultation will be open until 20 February 2012. Please allow yourself time to present all the facts you consider to be relevant as well as links to any additional documentation you would like the group to consider. Please try to respond to as many of the following questions as possible.*

Once you are satisfied with your response, please email it to emmanouil.schizas@accaglobal.com

Both the online survey and the written consultation will be administered and processed by ACCA (the Association of Chartered Certified Accountants). Your individual responses will not

be passed on to any third parties and only anonymous aggregate results will be communicated to members of the Good Practices Activity Group.

SECTION A: ABOUT THE RESPONDENT

A1. Which country are you based in?

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A2. Which of the following would best describe the organisation you work for/represent?

National Forum (response on behalf of the entire Forum)

and for other responses:

Bank or Banking Association

Business / Employer Association

Consumer / User Advocacy Group

Consultant or academic researcher

Department / Ministry / Government agency for Industry, Business or Enterprise Development, Technology or Innovation or Government standard-setting body

Department / Ministry responsible for interior affairs, regulatory reform or public sector reform

e-invoicing service or solution provider

e-Procurement / e-commerce / B2B solution provider

Financial regulator

Government purchasing / procurement authority

Individual responding in private capacity

Individual business (Large – 250 or more employees)

Individual business (craft or SME – less than 250 employees)

Professional body or private standard-setting body

Tax or revenue authority, Treasury Department or Ministry of Finance

A.3. What is the name of your organisation?

SECTION B: E-INVOICING OPERATING MODELS SUPPORTED BY SERVICE PROVIDERS (INCLUDING BANKS) OR CONDUCTED DIRECTLY

Based on your input in the online survey please think of the actual cases of operating model(s) that you would identify as most successful in driving adoption of e-invoicing in your country, whether supported by service providers or not. Out of these, choose the ONE CASE that has, in your view, been the most successful.

If you are able to, please also discuss one additional model / implementation whose adoption is not yet very wide but where you see evidence of a growing trend.

As a guide please take into account the following questions and issues and provide some further input or other perspectives as you wish.

Please remember that you will have the chance to discuss initiatives aimed at SMEs or public procurement in particular later on in the consultation.

B.1. Which *specific* implementations of these models have made a major difference to adoption of e-invoicing in your country? (where confidentiality is a concern please feel free to anonymise)

B.2. Are these 'best practice' implementations live yet, and if so, then roughly how fast is adoption / volume of transactions growing? Is there evidence of transaction volumes that you can share? Where can this be found?

B.3. Do service or solution providers, including banks, have a role within these models? If so, how do you think they could improve their services to support even higher levels of adoption?

B.4. Do accountants and other finance professionals, whether working in business or as external advisers, have a role within these models? If so, how do you think they could improve their services to support even higher levels of adoption?

B.5. In the above models, what level of integration with ERP systems is possible? What is the minimum level needed to exploit their potential? At which point does additional integration cease to add value?

B.6. What are some specific success factors and drawbacks associated with the particular operating models in question?

B.7. Do you think the selected operating models can be easily implemented in other countries or environments and how do they contribute to creating reach for cross-border trading parties?

B.8. Have three-corner models (both buyer and supplier connected to the same service provider) been effective in driving adoption to date? Are they likely to be dominant in your country in the future, and if not, what types of model are more likely candidates, e.g 2 or 4 Corner models

B.9. How should users interact with format/content standards for e-invoices? Should users be shielded from the use of such standards (any format in, any format out)? Or should they become familiar with their implementation and use as a means of accelerating adoption?

B.10. How strongly do you agree with the statement that format / content standards should first be implemented between service providers as a means of accelerating adoption?

B.11. In your opinion, are document images (e.g. PDF's) an acceptable compromise that can help pave the way for true e-invoicing? Are they good enough in themselves? Or are they a dead end?

SECTION C: INITIATIVES TARGETED AT SMALL AND MEDIUM SIZED ENTERPRISES (SMES)

Please think of cases the operating model(s) / services / initiatives that you would identify as most successful in driving adoption of e-invoicing by SME's in your country, whether supported by service providers or not. Out of these, choose the ONE CASE that has, in your view, been the most successful.

If you are able to, please also discuss one additional model / service / initiative whose adoption is not yet very wide but where you see evidence of a growing trend.

As a guide please take into account the following questions and issues and provide some further input or other perspectives as you wish Please remember that you will have the chance to discuss initiatives aimed at public procurement in particular later on in the consultation.

C.1. Which *specific* implementations of these models have made a major difference to adoption of e-invoicing by SMEs in your country? (where confidentiality is a concern please feel free to anonymise)

C.2. Are these 'best practice' implementations live yet, and if so, then roughly how fast is adoption / volume of transactions growing? Is there evidence of transaction volumes that you can share? Where can this be found?

C.3. Do service or solution providers, including banks, have a role within these models / initiatives? If so, how do you think they could improve their services to support even higher levels of adoption?

C.4. Do accountants and other finance professionals, whether working in business or as external advisers, have a role within these models / initiatives? If so, how do you think they could improve their services to support even higher levels of adoption?

C.5. In the above models, what is the level of integration that is possible with SMEs' accounting systems? What level of integration is realistically possible for most SMEs?

C.6. What are the specific success factors and drawbacks associated with the particular operating models / initiatives in question, from the point of view of a small, owner-managed business?

C.7. How well aware are SMEs of the identified models/solutions and are there particular perceptions (whether accurate or false) that discourage them from adopting these?

C.8. What skills, capabilities, knowledge and other resources do SMEs and their owner/managers need to develop in order to use the identified good practices?

C.9. Do you think the operating models that have driven SME adoption can be easily implemented in other countries or environments and how do they contribute to creating reach for cross-border trading parties?

SECTION D: THE ROLE OF GOVERNMENT AND THE PUBLIC SECTOR

Please think of cases of the operating model(s) or government initiatives that you would identify as most successful in driving adoption of e-invoicing in public procurement or by public sector suppliers in your country, whether supported by service providers or not. Out of these, choose the ONE CASE that has, in your view, been the most successful.

If you are able to, please also discuss one additional model / implementation / initiative whose adoption is not yet very wide but where you see evidence of a growing trend.

As a guide please take into account the following questions and issues and provide some further input or other perspectives as you wish.

D.1 Which *specific* models/ implementations/initiatives have made a major difference to adoption of e-invoicing for the purposes of public procurement in your country? - (where confidentiality is a concern please feel free to anonymize)

D.2 Are these 'best practice' implementations / schemes live yet, and if so, then roughly how widely have they been adopted? Is there evidence of transaction volumes that you can share? Where can this be found?

D.3. Do service or solution providers, including banks, have a role within these models / schemes? If so, how do you think they could improve their services to support even higher levels of adoption?

D.4. Do accountants and other finance professionals, whether working in business or as external advisers, have a role within these models? If so, how do you think they could improve their services to support even higher levels of adoption?

D.5. In the above models, what level of integration with public sector ERP or accounting systems is possible? What level of integration is possible with suppliers' ERP or accounting systems? What is the minimum level needed to exploit their potential? At which point does additional integration cease to add value?

D.6. What are the specific success factors and drawbacks associated with the particular schemes/operating models in question?

D.7. Do you think the selected models / schemes can be easily implemented in other countries or environments and how do they contribute to creating reach for cross-border procurement?

D.8. If you have knowledge or experience of public sector initiatives and government policy regarding e-invoicing in other countries in or outside of the EU, which 1-2 specific countries would you identify as leaders in promoting adoption of e-invoicing?

D.9. Does the public sector in your country appear to favour a specific e-invoicing model, or specific standards in conducting transactions? Which are they?

D.10. If you are aware of the role of PEPPOL (the Pan-European Public Procurement Online in promoting e-invoicing in the public sector, how would you judge its progress and its potential so far?

SECTION E: ADDITIONAL RESOURCES

Please identify any documents or web-sites you are personally aware of that summarise experiences, facilitate knowledge exchange or describe good practices in promoting the adoption of e-invoicing.