



Study on the evaluation of invoicing rules of Directive 2006/112/EC

Final Report

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EUROPEAN COMMISSION

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Directorate-General for Taxation and Customs Union

2019

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Abstract

This Evaluation Study was prepared for the European Commission – Directorate General for Taxation and Customs Union and it is intended to contribute to the forthcoming evaluation of the VAT invoicing rules, and, in particular, of those affected by the Second Invoicing Directive. This Directive was well transposed by the Member States, with only minor exceptions of a very limited relevance. The Second Invoicing Directive was one of the factors in supporting the growth in the use of e-invoicing technologies among EU businesses since 2014. This resulted in EUR 920 million savings over the period 2015-2017, of which about EUR 540 million in 2017. Those savings represent the bulk of the administrative burden reduction generated by this legislative act, which, overall, amount to EUR 1.1 billion over the 2015-2017 period. Differently, the Directive had a negligible impact on the fight against VAT fraud, as the simplifications to e-invoicing and invoicing rules did not affect tax control activities or caused costs for tax administrations. As its provisions were largely considered as working well by the stakeholders, few changes to the current legal framework are warranted in the short-term, and, whenever possible, by means of soft law instruments. In the medium-term, a revision of the VAT Directive to promote the use of automatically-processable e-invoices and the diffusion and harmonisation of additional e-reporting requirements may be considered.

Resumé

La présente étude d'évaluation a été réalisée pour la Commission européenne – Direction générale de la fiscalité et de l'union douanière – dans le but de contribuer à la prochaine Évaluation de la Commission de la Deuxième Directive Facturation. La Directive a été bien transposée et seulement des divergences mineures avec les législations nationales se sont produites. La Deuxième Directive Facturation Directive a été l'un des facteurs permettant de soutenir une plus grande utilisation des technologies de facturation électronique de la part des entreprises de l'UE depuis 2014. Cela s'est traduit par des économies de 920 millions d'euros sur la période 2015-2017, dont environ 540 millions d'euros en 2017. Ces économies représentent l'essentiel de la réduction de la charge administrative générée par cet acte législatif, qui s'élève globalement à 1,1 milliard d'euros sur la période 2015-2017. Par contre, la Directive a eu un impact négligeable sur la lutte contre la fraude à la TVA, car les simplifications apportées aux règles de facturation et de facturation électronique n'ont pas eu d'impact sur les activités de contrôle fiscal ni entraîné de coûts plus importants à la charge des administrations fiscales. Étant donné que les parties prenantes ont considéré ces dispositions comme largement efficaces, peu de changements au cadre juridique actuel sont nécessaires à court terme et, dans la mesure du possible, au moyen d'instruments juridiques non contraignants. À moyen terme, une révision de la Directive TVA pourrait être envisagée afin de promouvoir l'utilisation de factures traitables automatiquement, ainsi que la diffusion et l'harmonisation d'obligations supplémentaires en matière de reporting électronique.

Kurzdarstellung

Diese Evaluierung wurde für die Europäische Kommission – Generaldirektion Steuern und Zollunion ausgearbeitet und soll zur bevorstehenden Evaluierung der Rechnungsstellungsvorschriften der MwSt-Richtlinie, insbesondere jener, die von der Zweiten Rechnungsstellungsrichtlinie betroffen sind, beitragen. Die Richtlinie wurde von den Mitgliedsstaaten gut umgesetzt, mit nur wenigen Ausnahmen von sehr geringer Relevanz. Die zweite Rechnungsstellungsrichtlinie war einer der Faktoren, die das Wachstum im Gebrauch von e-Rechnungsstellungstechnologien unter EU Unternehmen seit 2014 förderten. Dies resultierte in EUR 920 Millionen Ersparnissen über die Zeitspanne von 2015-2017, davon in etwa EUR 540 Millionen im Jahr 2017. Diese Ersparnisse stellen den Großteil der durch diesen Rechtsakt generierten Verringerungen im Verwaltungsaufwand dar, welche sich insgesamt auf EUR 1.1 Milliarden für den Zeitraum 2015-2017 belaufen. Auf der anderen Seite hatte die Richtlinie einen vernachlässigbaren Einfluss auf den Kampf gegen Mehrwertsteuerbetrug, da die Vereinfachungen der e-Rechnungsstellungsvorschriften und Rechnungsstellungsvorschriften die Steuerkontrollaktivitäten nicht beeinflussten und keine Kosten für Steuerbehörden verursachten. Da die Rechtsvorschriften von den Stakeholdern weitgehend als gut funktionierend angesehen werden, sind auf kurze Sicht nur wenige Veränderungen des rechtlichen Rahmens gerechtfertigt und wenn möglich durch Soft-Law-Instrumente. Mittelfristig könnte eine Revision der MwSt-Richtlinie zur Förderung von maschinell verarbeitbaren Rechnungen und zur Verbreitung und Harmonisierung von zusätzlichen e-Berichtspflichten in Betracht gezogen werden.

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Acronyms and Abbreviations

AES	Advanced Electronic Signature
BAU	Business-As-Usual
BCAT	Business Controls that create a reliable Audit Trail
Bn	Billion
BS	Business Stakeholders
B2B	Business-to-Business
B2C	Business-to-Customer
B2G	Business-to-Government
CEF	Connecting Europe Facility
CEN	European Committee for Standardization
CJEU	Court of Justice of the European Union
DG TAXUD	Directorate General for Taxation and Customs Union
e-...	electronic ...
EC	European Commission
ECB	European Central Bank
EESPA	European e-Invoicing Service Providers Association
EDI	Electronic Data Interchange
eIDAS	electronic IDentification, Authentication and trust Services
EMSFEI	European Multi-Stakeholder Forum on Electronic Invoicing
EO	Economic Operator
EQ	Evaluation Question
ERP	Enterprise Resource Planning
EU	European Union
EUAV	EU Added Value
EUR	Euro
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GoBD	<i>Grundsätze zur ordnungsmäßigen Führung und Aufbewahrung von Büchern, Aufzeichnungen und Unterlagen in elektronischer Form sowie zum Datenzugriff</i> (Principles for the proper management and storage of books, records and documents in electronic form, as well as data access')
IAS	International Accounting Standards
ICT	Information and Communications Technology
IFRS	International Financial Reporting Standards
IL	Intervention Logic
IO	Issuance of an Invoice
IT	Information Technology
I&A	Integrity and Authenticity
Mn	Million
MNC	Multinational Corporation
MS	Member State(s)
MTIC	Missing Trader Intra Community
OCR	Optical Character Recognition
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
PC	Public Consultation
PDF	Portable Document Format

PI	Private Individuals
p.p.	Percentage Points
QES	Qualified Electronic Signature
SAF-T	Standard Audit File for Tax
SCM	Standard Cost Model
SEPA	Single European Payment Area
SID	Second Invoicing Directive (Directive 2010/45/EU)
SME	Small and Medium-sized Enterprise
SP	Service Provider
TA	Tax Authority
TC	Targeted Consultation
TIF	Tagged Image File Format
TIN	Tax Identification Number
ToR	Terms of Reference
UBL	Universal Business Language
VAT	Value Added Tax
VIES	VAT Information Exchange System
VTTL	VAT Total Tax Liability
VP	VAT Practitioner
XML	Extensible Markup Language

1 INTRODUCTION

1.1 Nature and content of the report

This Final Report (the 'Report' or the 'Study') has been prepared within the Assignment for a study on the evaluation of the invoicing rules under the VAT Directive 2006/112/EC (the 'Assignment' or the 'Evaluation'). The Report is submitted to the European Commission, Directorate General for Taxation and Customs Union (DG TAXUD or the 'Client') by a group of consulting firms and research institutions led by Economisti Associati (hereinafter collectively referred to as 'the Consultant'). The Report is intended to contribute to the forthcoming Commission Evaluation of the invoicing rules included in the Directive 2006/112/EC¹ (the 'VAT Directive'), and, in particular, of those affected by the Second Invoicing Directive² (SID, or the 'Directive').

The main text of this Report is divided in **ten sections**:

- The remainder of Section 1 provides an overview of the **background and context** of the Assignment.
- Section 2 presents the **evaluation approach** and the data gathering activities carried out;
- Section 3 reviews the status of **implementation** of the Directive and provides the **legal mapping** of how its provisions have been transposed;
- Section 4 addresses the **relevance** of the Directive, assessing the ongoing importance of its objectives and the extent to which the issues targeted have been solved or still persist;
- Section 5 analyses the **effectiveness** of the Directive by gauging whether and to what extent the Directive achieved its objectives, as well as the factors that possibly hindered such an achievement;
- Section 6 deals with the **efficiency** of the Directive, that is the measurement of the regulatory costs and cost savings generated, for both economic operators and tax authorities;
- Section 7 investigates the **external coherence** of the Directive with other relevant pieces of EU legislation, as well as with other EU strategies and initiatives;
- Section 8 measures the **EU added value** associated to the Directive;
- Section 9 reviews stakeholders' opinions on possible **revisions** to the Directive; and finally
- Section 10 presents the **conclusions and possible ways forward**.

In addition to the main text, there are **seven Annexes** providing supporting data and analysis. The Annexes A to F, including background information and methodological specifications, details on the targeted consultation, the Synopsis Report of the Public Consultation, and the list of references, are presented in Volume 2 of this Report. Annex G, illustrating the results of the legal mapping exercise, is provided as a separate Excel file.

¹ Council Directive 2006/112/EC on the common system of value added tax.

² Council Directive 2010/45/EU amending Directive 2006/112/EC on the common system of value added tax as regards the rules on invoicing.

1.2 Overview of the Second Invoicing Directive

1.2.1 Background

The Value Added Tax (VAT) is a tax levied on all goods and services bought and sold for use or consumption within the EU. The VAT is a multi-stage tax calculated, and thus charged, on the value added at each stage of the value chain. It is collected from traders through a system of partial payments. At regular intervals, a taxable person (i.e. a business identified for VAT purposes) pays the VAT due, which is the VAT received on the sale of its outputs after deducting the VAT paid on inputs. This system ensures that the tax is neutral, regardless of the number of transactions. The principles and the structure of the VAT are incorporated in EU law, namely in the VAT Directive. The application of the EU framework is then based on its implementation into the national legislation, so that local VAT rules can and do still differ to a certain degree.

In order to receive a deduction for the VAT paid on inputs, VAT taxable persons are required to possess an invoice issued by or on behalf of the seller. The invoice shall include the supplier's and customer's details, and the information on the nature of the transaction, such as the taxable amount, the VAT rate, and the VAT due. At the end of each reporting period, each taxable person calculates its VAT liability by subtracting the cumulative amount of VAT stated on its purchase invoices from the cumulative amount of VAT stated on its sales invoices. Thus, **the invoice is a central feature of the VAT system**, playing a threefold role: (i) it enables taxable persons to prove their right of deduction; (ii) it contains the information as to which VAT regime is applicable; and (iii) it enables tax authorities to conduct controls.

On December 2001, the First Invoicing Directive³ was adopted, with the aim of simplifying, modernising and harmonising the European VAT invoicing rules. These invoicing provisions were subsequently consolidated in the VAT Directive, in Chapter 3 'Invoicing' of Title XI 'Obligations of taxable persons and certain non-taxable persons'. However, **the stated objectives of the First Invoicing Directive were not fully met, as it had not been implemented and interpreted in a uniform manner by Member States**. Firstly, the optional invoicing regimes included in the First Invoicing Directive allowed Member States to maintain dissimilar national rules; furthermore, diverging national interpretations of the specific requirements further reduced the level of harmonisation. This was, for instance, the case of electronic invoicing (e-invoicing). Such an uneven landscape was clearly ascertained by the e-invoicing Expert Group appointed by the Commission in 2007 in its final report⁴. The same conclusions were reached by an evaluation study, supported by a public consultation, that analysed four areas of VAT invoicing rules (the requirement to issue an invoice; the content of the invoice; e-invoicing; and archiving of invoices), published in November 2008⁵.

On 28 January 2009, the EU Commission⁶ published a proposal for a Directive⁶, which aimed at addressing the shortcomings of the First Invoicing Directive, in particular the legal uncertainty, the unnecessary administrative burdens, the barriers to the uptake of e-invoicing, and the hurdles to cross-border transactions. After political negotiations, on

³ Council Directive 2001/115/EC amending Directive 77/388/EEC with a view to simplifying, modernising and harmonising the conditions laid down for invoicing in respect of value added tax.

⁴ European Commission (2009), Final Report of the Expert Group on e-Invoicing.

⁵ PriceWaterhouseCoopers (2007), A Study on the Invoicing Directive (2001/115/EC), Final report for the European Commission. The study was commissioned to provide the analytical background for the reporting obligation of Article 237 of the VAT Directive, which required the Commission to present a report on technological developments in the field of e-invoicing and, if appropriate, an amending proposal.

⁶ European Commission, Proposal for a Council Directive amending Directive 2006/112/EC on the common system of value added tax as regards the rules on invoicing, COM(2009)21, 28.1.2009. Hereinafter, the 'Proposal'.

13 July 2010, the Council of the EU reached an agreement on the Commission proposal and **adopted the Directive 2010/45/EU, amending Directive 2006/112/EC on the common system of value added tax as regards the rules on invoicing**. The final act adopted by the Council did not include some of the radical changes initially recommended by the Commission. The Directive entered into force on 11 August 2010; its provisions had to be transposed by the Member States by 31 December 2012 for their application as of 1 January 2013.

The Directive introduces a **number of changes to the VAT Directive**, in the following areas:

- 1) **Invoice issuance and content**. The largest group of provisions, including rules on when, by whom, and how a standard VAT invoice is to be issued, rules applicable to specific invoicing regimes (i.e. summary, simplified, or self-billing invoices), and rules applicable to invoices for cross-border transactions;
- 2) **e-Invoicing**. A small group of provisions amended under Section 5, renamed 'Paper invoices and electronic invoices', of the Chapter on invoicing;
- 3) **Cash accounting and other provisions**. A residual group, including (i) rules on cash accounting; (ii) rules on the chargeability, deductibility, and payment of VAT; and (iii) rules on the treatment and registration of transfer of goods for valuation purposes.

The relevant changes are described in more detail in Section 3 of this Report.

1.2.2 Intervention Logic

The underlying Intervention Logic (IL) of the Directive has been reconstructed to illustrate how its provisions are supposed to achieve its overarching and specific policy objectives (as summarized in Box 1). The developed IL is outlined in Figure 1, going from specific groups of provisions (to the left) to the general objectives of the Directive (to the right). The various items of the IL are connected by arrows that show how a lower level effect may contribute to a higher level effect in a logical chain. In some cases, items are grouped by clusters (in coloured circles), as more than one element at a lower level can jointly contribute to one or more elements at the upper level. In these cases, the linkages are depicted by bold arrows (general causal links).

Box 1 – Key elements of the Intervention Logic

As pointed out in the Better Regulation Toolbox, *'the Intervention Logic provides a (narrative) description and / or diagram summarising how the intervention was expected to work'*⁷. More in details, this term designates a conceptual model describing the chain of causal linkages between the resources devoted to a certain initiative (the 'inputs'), the actions performed (the 'activities'), and the sequence of 'effects', intended or unintended. In case of legislative interventions, the inputs correspond to the legislative process, and are, therefore, not relevant to the analysis, and the activities coincide with the provisions of the piece of legislation under assessment. As for the 'effects', they can be further subdivided into three levels, namely: (i) the '**outputs**', which are the most immediate results of the activities performed; (ii) the '**outcomes**', corresponding to the specific objective(s), and (iii) the '**impacts**', corresponding to the general objective(s) of the intervention. Finally, public policies are not implemented in a vacuum and the ability of any intervention to achieve the intended results also depends on a set of **external factors**. Therefore, it is important that the causal chain linking activities, outputs, outcomes and impacts be accompanied by a description of the external factors that may exert an influence on the performance of the intervention.

⁷ European Commission (2017), Better Regulation Toolbox, at p. 334.

General Objectives (Impacts). The Directive aims at contributing to four general objectives, namely:

- 1) The **reduction of the administrative burdens on businesses**. VAT rules, being fairly complex and affecting a very large number of taxable persons, generate a significant amount of administrative burdens on companies. For this reason, various revisions of the VAT Directive aimed at reducing those burdens, and the SID makes no exception;
- 2) The **reduction of VAT frauds**, some of which are also linked to the functioning of invoicing rules, such as the underreporting of the VAT via false or irregular invoices, the claims of excessive deductions, or the so-called carousel or Missing Trader Intra Community (MTIC) schemes;
- 3) The **proper functioning of the Internal Market**, as the removal of regulatory barriers to cross-border transactions arising from the invoicing rules and their application across the EU stand at the core of the Directive;
- 4) **SME promotion**, by introducing targeted simplifications and fostering the adoption of favourable tax regimes (such as the cash accounting scheme) and e-invoicing.

Specific Objectives (Outcomes). The Directive aims at directly achieving several specific objectives. The key specific objectives consist of: (i) **reducing the regulatory fragmentation**, by making VAT invoicing rules more similar across the Member States, and (ii) **simplifying the rules on invoicing and e-invoicing**. The achievement of these outcomes is expected to directly contribute to some of the general objectives, for example, by reducing the costs borne by businesses to comply with legal obligations and lowering the regulatory barriers faced by cross-border operators. In addition, these specific objectives are expected to contribute to the achievement of the general ones in an indirect way, by fostering: the **adoption of specific invoicing regimes**, which, in turn, could lower administrative burdens on businesses, and, in particular, on SMEs; and the **increase of e-invoicing uptake** for both domestic and cross-border transactions, which is expected to contribute, to a various extent, to all general objectives. Finally, some provisions of the Directive aim at achieving other specific objectives: (iii) a **higher uptake of the cash-accounting scheme**, which, in turn, supports SMEs, and (iv) the **improvement of tax controls** due to the shortening of delays between the economic transaction and its VAT chargeability for intra-EU supplies.

Activities and Outputs. As indicated above, the activities correspond to the groups of provisions of the Directive, and namely:

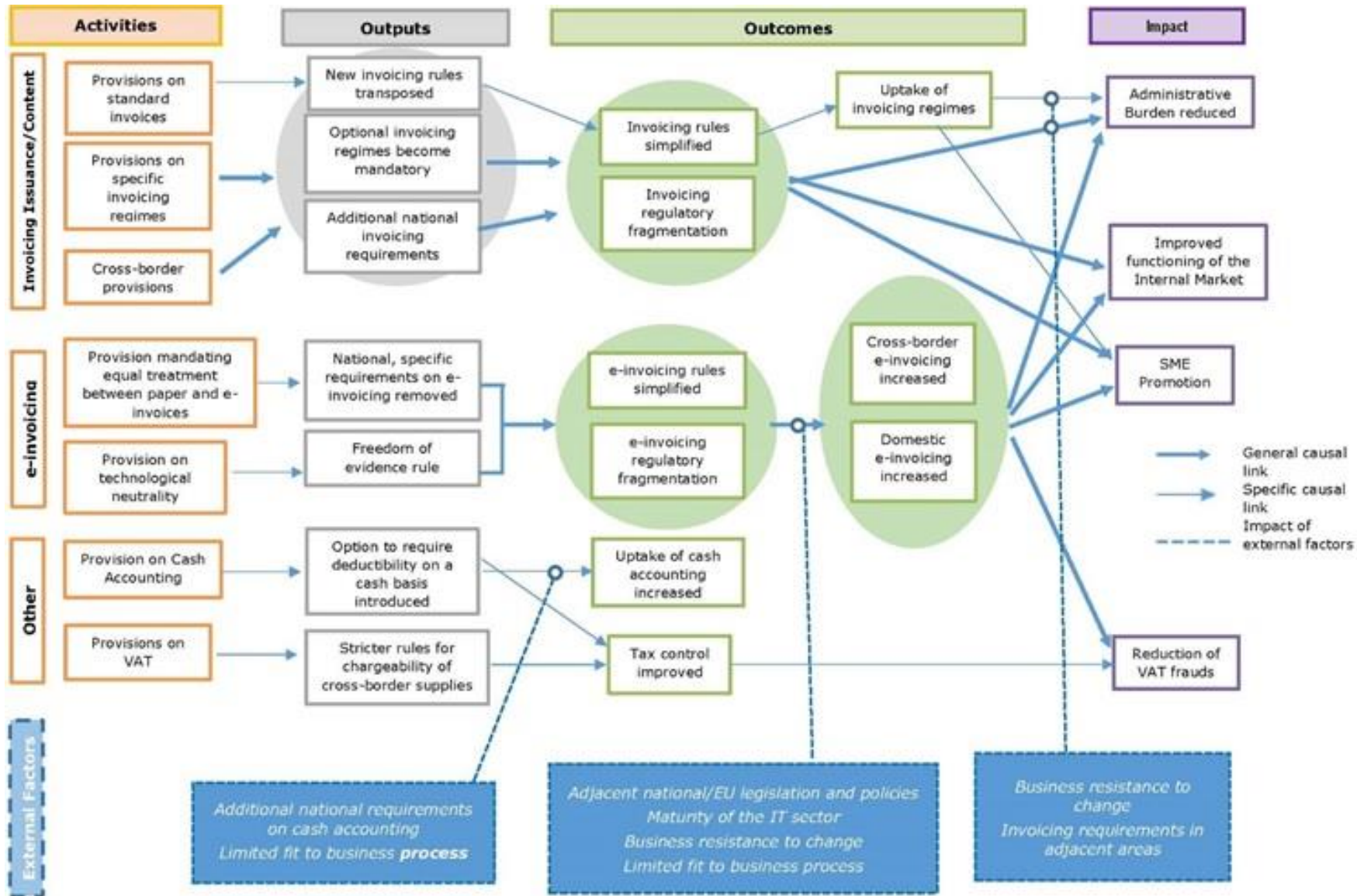
- 1) The changes to the content of standard invoices and other invoice requirements, which support the simplification objective;
- 2) The new provisions on cross-border invoices and the limitations of national discretionary powers on invoicing regimes, to achieve the reduction of regulatory fragmentation;
- 3) The removal of mandatory technological requirements, and the consequent equal treatment of paper-based and electronic invoices, which foster the increase of e-invoicing uptake;
- 4) The introduction of the option to require deductibility on a cash basis, which is expected to increase the attractiveness of the cash accounting scheme for the Member States.

External Factors. The extent to which the Directive provisions are capable of influencing the behaviour of companies and tax authorities – thus generating its outcomes – is influenced by a host of external conditions. This complexity applies even more when the overall performance of the Directive in terms of its contribution to the

general objectives is considered. For the sake of simplicity, this broad range of factors has been grouped under **five categories**, namely:

- 1) **The business resistance to changes**, which could limit or delay the adoption of new and simpler invoice regimes and processes. Such a resistance to change, which may also be shared by VAT practitioners and tax advisors, is especially relevant when the national interpretation and application of the SID provisions have not been fully clarified;
- 2) **The stakeholders' limited fit to process change**. For instance, for some SMEs, the return on investment from shifting to e-invoicing may be negative given the limited benefits achievable due to the small volume of invoices exchanged. Similarly, the potential negative effects of cash-accounting – stemming from the more burdensome accounting procedures – may well reduce its attractiveness for economic operators;
- 3) **The VAT national legislation**. Existing divergent national requirements in areas not covered by the Directive may still lead to uncertainty and add complexity for economic operators. For instance, different national storage rules may still represent a barrier towards the e-invoicing adoption;
- 4) **The adjacent national/EU legislation and policies**. Reporting requirements, archiving rules, and law enforcement practices largely remain a matter of national law. The ensuing cross-country differences may negatively affect the performance of the Directive. Vice versa, the fact that several Member States are making Business-to-Government (B2G) e-invoicing mandatory following the application of Directive 2014/55 is expected to contribute to the uptake of this technology;
- 5) With exclusive reference to e-invoicing, **the maturity of the IT sector**, whose capacity to supply secure and interoperable e-invoicing solutions and services at reasonable costs obviously influences the likelihood of economic operators (especially SMEs) to adopt them.

Figure 1 – Intervention Logic of the Directive



2 EVALUATION APPROACH

This Section describes the approach developed to undertake the tasks required by the Assignment, and it is structured in the following way:

- Section 2.1 outlines the **evaluation framework**, including the evaluation questions (the detailed evaluation matrix is reported in Volume 2 - Annex F);
- Section 2.2 **Error! Reference source not found.** describes the **data gathering activities** carried out.

2.1 Evaluation Framework

The Assignment is centred on a set of **evaluation questions**, connected to the broader evaluation criteria, in accordance with the Better Regulation guidelines. More specifically, the evaluation questions are grouped under the five standard criteria of: (i) relevance; (ii) effectiveness; (iii) efficiency; (iv) coherence; and (v) EU added value. The evaluation questions are shown in Table 1 below.

Relevance. The assessment of this evaluation criterion focuses on assessing, first the **extent to which the objectives of the Directive are still consistent with the needs and priorities of different stakeholders**, both public and private, and with the evolving regulatory and technological environment. Second, it focuses on the **extent to which the Directive provisions are addressing issues that are still present**.

Effectiveness. The assessment of the effectiveness requires gauging **whether and to what extent the Directive achieved its objectives**, as well as the factors that hindered such an achievement. The analysis focuses on the following specific and general objectives: (i) the increase in the uptake of e-invoices; (ii) the reduction of the administrative burdens for businesses; (iii) the improved functioning of the internal market; (iv) SME promotion; and (v) the support to tax control activities and the fight against VAT non-compliance.

Efficiency. Broadly speaking, assessing efficiency requires comparing the costs imposed by the legislation to its benefits, in order to verify whether the latter outweigh the former or, in other words, whether the net impact of the Directive is positive. In operational terms, the analysis investigates **what the costs generated by the invoicing rules revised by the Directive are, and how they compare to the cost savings**, to measure the overall savings or additional costs. This exercise is carried out separately for the two main types of stakeholders, i.e. economic operators and tax authorities.

Coherence. Under the criterion of coherence, the Evaluation assesses the **consistency of the Directive with other EU interventions**, and namely: (i) inconsistencies or synergies with other pieces of EU legislation relevant to the areas of invoicing and e-invoicing; (ii) the alignment between the general objectives of the Directive and other EU strategies in the fields of e-invoicing; and (iii) inconsistencies or synergies between the Directive and other EU non-legislative actions in the area of e-invoicing.

EU Added Value. The EU Added Value (EUAV) is intended as a measure of the additional benefits generated by a policy intervention at EU level, as opposed to leaving the subject matter in the hands of Member States, which could act by means of both national measures as well as bilateral or multilateral actions. In order to assess the EUAV, the Consultant thus analyses: (i) the likelihood of outcomes similar to those

attributed to the SID to happen; and (ii) the share of benefits which correspond to the EU level action.

Table 1 – Evaluation Questions

Relevance
EQ#1. To what extent do the objectives of the Second Invoicing Directive still correspond to the needs of the stakeholders, notably the economic operators and the Member States administrations?
EQ#2. To what extent the main issues, addressed by the Invoicing Directive still persist, have improved, worsened, or otherwise changed?
EQ#3. Are there any new stakeholders' needs, also in light of technological developments in the field of e-invoicing, which should be addressed through EU-level invoicing rules?
Effectiveness
EQ#4. To what extent has the Directive contributed to the achievement of its objectives, in terms of: (i) reduction of administrative burdens for businesses; (ii) increase of the uptake of e-invoicing; (iii) supporting effective tax control; (iv) contribution to improved functioning of the Internal Market; and (v) contribution to SME promotion.
EQ#5. What were the factors that hindered the achievement of the objectives in terms of the above-mentioned objectives
Efficiency
EQ#6. To what extent the invoicing rules introduced by the Directive were efficient i.e. whether the benefits of the reduced costs of issuing invoices, legal certainty and uniform rules have outweighed the costs imposed upon businesses by the new rules?
Coherence
EQ#7. To what extent are the rules provided for in the Invoicing Directive coherent with other EU interventions and policy priorities?
EU Added Value
EQ#8. To what extent has the EU intervention been creating added value with respect to Member States acting at national level or through multilateral arrangement?

The Report also provides an answer to a number of forward-looking questions, which are discussed separately from the core evaluation questions, in Section 10. They read as follows:

- 1) if the needs of stakeholders have evolved, what should be changed to make sure the rules correspond to the needs?
- 2) if objectives were not fully achieved, is there still room to fully achieve the objective? What actions should be taken to increase the chances of full success?
- 3) do the issues addressed by the Invoicing Directive continue to require action at EU level?

2.2 Data collection activities

The Evaluation relied on a number of data collection activities, namely:

- 1) a **legal mapping exercise**, to gather information on the national invoicing rules and on the changes brought about by the implementation of the Directive;
- 2) a large scale **business survey**, to retrieve information on the e-invoicing technologies used, the number of (e-)invoices exchanged and the main drivers of and barriers to e-invoicing uptake;
- 3) various streams of **targeted consultation**, covering tax authorities, economic operators, VAT practitioners, business federations, and e-invoice service providers; and
- 4) a **public consultation**, run by the European Commission, and open to all European citizens and organisations.

2.2.1 Legal mapping exercise

The legal mapping exercise, i.e. the review of the national legal frameworks on VAT invoicing rules, had three purposes: (i) **to assess the status of transposition**; (ii) **to examine the main differences in interpretation and application** of invoicing rules across Member States; and (iii) to assess **the extent of the legal change** in each country. To achieve these aims, this fact-finding activity gathered accurate information on how the 28 Member States have implemented the Directive and on the relevant national norms previous to its adoption. This required collecting information on (i) the legislative transposition measures; (ii) secondary legislation, commentaries and other procedural documents guiding the application of the primary provisions; and (iii) any other piece of legislation with a direct impact on invoicing rules. The legal mapping has been carried out by the Mazars/Praxity Global Indirect Tax Group, using a dedicated survey tool.

2.2.2 Business Survey

The Business Survey was carried out in eight Member States – France, Germany, Italy, the Netherlands, Poland, Romania, Spain and Sweden – selected in accordance with the Client to be representative of the geographical diversity of EU regions, as well as of the different national e-invoicing frameworks. **The deployment of the survey was entrusted to YouGov**, and the analysis of its results was performed by the Consultant. The questionnaire consisted of a small number of close-ended, matrix questions, aimed at gathering information on: (i) the volume of invoices and e-invoices annually exchanged, (ii) the types of e-invoice exchanged and the starting year of each e-invoicing process; (iii) the most commonly used e-invoicing solutions and (iv) the remaining barriers to e-invoicing adoption, including a detailed review of the legal ones.

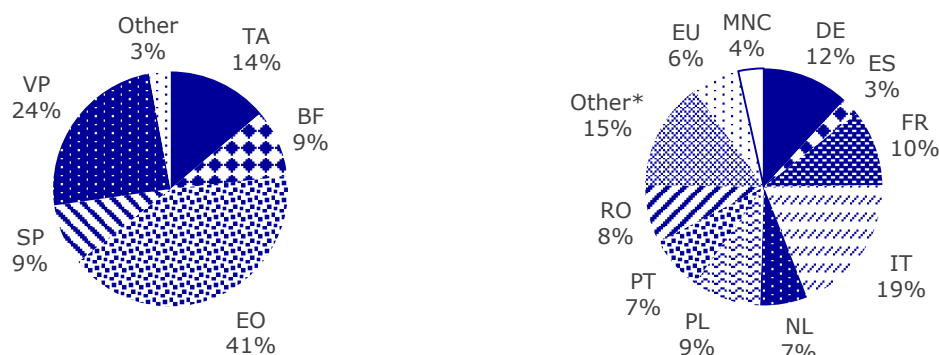
As envisaged, the business survey covered some 250 respondents in each of the eight countries, for a total of 2,007 completed questionnaires. As far as the size of the businesses is concerned, the majority (82%) of respondents were SMEs (including micro, small and medium-size companies), corresponding to a total of 1,637 firms. In addition, 370 large companies with more than 250 employees took part in the questionnaire. In line with the initially agreed quotas, the sample breakdown by size was largely identical across all the countries, with the exception of Sweden, where SMEs accounted for a larger share of the total (93%).

2.2.3 Targeted consultations

The targeted consultations were designed to elicit information and opinions from a vast range of private and public stakeholders. They encompass: (i) **familiarization interviews**; (ii) **fieldwork in seven Member States**; (iii) **an e-mail survey of tax authorities in the non-fieldwork Member States**; and (iv) **an e-mail survey of VAT practitioners**.

In total, 202 stakeholders participated in the targeted consultation. Figure 2 provides an overview of the distribution per Member State and stakeholder groups. Economic operators represent the most important category with 83 stakeholders, followed by business federations and tax authorities. From a geographical perspective, stakeholders from 26 Member States participated in the consultations, thus ensuring a very comprehensive coverage; obviously, the bulk of stakeholders originate from the fieldwork Member States. The consultations also covered 13 EU-level organisations, and 7 multi-national companies.

Figure 2 – Breakdown of stakeholders interviewed by stakeholder group (left) and Member State (right)



Note: TA: Tax Authorities; BF: Business Federations; EO: Economic Operators; SP: Service Providers; VP: VAT Practitioners; MNC: Multi-National Corporations

*: Member States with less than 5 participating stakeholders are summarised as 'other'. These are: AT, BE, BG, CZ, DK, EE, IE, EL, HR, CY, LV, LT, LU, HU, SI, SK, FI, SE.

Familiarisation interviews. The familiarisation interviews were conducted during the inception phase, to gather a better understanding of the overall functioning of the Directive, and elicit comments and opinions from the key EU-level stakeholders and experts regarding the legal changes introduced and their possible effects. A total of 14 stakeholders were interviewed face-to-face or via telephone, based on semi-structured checklists, with the members of the various EU-level expert groups, such as the EU VAT Forum and the VAT Expert Group, VAT practitioners or federations thereof, EU business federations, and e-invoicing service providers or federations thereof. The Consultant also took part in **two focus group discussions**, namely: (i) one with members of the European Multi-Stakeholder Forum on e-Invoicing; and (ii) one organised within the framework of BusinessEurope's VAT Group.

Fieldwork. The fieldwork targeted consultation has been carried out in seven selected Member States: France, Germany, Italy, the Netherlands, Portugal, Poland, and Romania. The sample of Member States was selected on the basis of four key criteria:

- 1) Geographical balance, to ensure coverage of different EU regions, and of countries with different economic structured, business behaviour and regulatory models;
- 2) Size balance, to cover both large Member States as well as mid-to-small-sized ones;
- 3) Directive impact, over representing countries where the national VAT legislation was significantly amended following the transposition of the Directive, to gather sufficient information on the effects of the Directive; and
- 4) Invoicing and e-invoicing strictness, to cover Member States with a different approach to invoicing and e-invoicing requirements.

The interview programme in each of the seven Member States was targeted at: (i) the tax authority; (ii) business federations, also including SME federation; (iii) economic operators of different sizes and active in a variety of sectors; (iv) e-invoicing and e-archiving services providers; and (v) VAT practitioners and tax advisors. For each of the five types of stakeholders interviewed, a tailored questionnaire was prepared, and finalised in agreement with the Client. The aim was set at 12 interviews per country, which was met in all Member States and greatly surpassed in some of them, with a total of **152 interviews**. The series of on-the-ground missions allowed to conduct the majority of interviews (49%) in person through face-to-face meetings. A number of

interviews took also place through teleconferences (20%) or in writing via an email interaction (31%).

Tax authorities. The tax authorities from the non-fieldwork Member States were asked to participate to the targeted consultation via an e-mail survey, that required the compilation of a written questionnaire, and, in most cases, a second round of e-mail interaction. Out of the 21 non-fieldwork Member States, **tax authorities from 19 countries provided responses to the consultation.** The targeted consultation with the tax authorities was designed for three objectives: (i) validate the findings of the legal mapping, and, in particular, the analysis of transposition and implementation; (ii) collect tax authorities' opinions to feed the relevant evaluation indicators; and (iii) collect factual information on VAT fraud and control activities.

VAT Practitioners. Another e-mail survey was targeted at eliciting further contributions from VAT practitioners. A total of **17 contributions** were received from VAT practitioners, in addition to the interviews performed during the fieldwork operations. The survey focused on collecting the VAT practitioners' qualitative assessment on a range of topics, and namely (i) the appropriateness of the current invoicing rules; (ii) the reason why certain specific invoicing regimes have been adopted or not by businesses; (iii) whether the Directive had an impact on tax control; (iv) the Directive's contributions vis-à-vis other drivers; and (v) a set of forward looking questions on possible revisions.

2.2.4 Public Consultation

The Public Consultation was carried out by the European Commission, with the Consultants' support, in order to gather the appreciation of stakeholders and citizens on the working of the Directive and possible revisions. The consultation was launched on 13 June and it remained open until 20 September 2018, for a total of 14 weeks (i.e. for longer than the minimum 12 weeks, to take into account the summer period).

The questionnaire consisted of 56 questions, divided into seven sections, including one introductory section about the respondent's profile, and six thematic sections. Five out of the six thematic sections included general questions suitable for all types of respondents. One section B was targeted only at economic operators, as it inquired invoicing practices. The questions concerned: (i) the respondents' perception of the issues at stake and of the functioning of the Directive; (ii) the assessment of invoicing and e-invoicing rules; and (iii) the agreement or disagreement with a number of revisions. The stakeholders could upload additional documents at the end of the public consultation, and two respondents did so.

A total of 175 valid responses⁸ were received from 23 Member States. The majority of respondents (113) answered the public consultation in their professional capacity, while 62 private individuals participated in their personal capacity. Amongst professionals, the largest group of respondents is that of private enterprises other than consultancies and law firms, with 55 respondents. Most of the participating companies were SMEs, accounting for more than 80% of responses, and almost half of all respondents were micro-sized. Noteworthy are furthermore the group of professional and self-employed consultancies or law-firms, and that of trade, business or professional associations with 35 and 14 respondents, respectively.

⁸ The total replies received amounted to 177 but 2 records appeared as duplicate submissions from the same entities so were excluded from the analysis.

3 DIRECTIVE TRANPOSITION AND IMPLEMENTATION

This section presents the analysis of how the Directive has been **transposed** and **implemented** by the Member States. This analysis, on one side, aimed at verifying whether the Member States have correctly transposed the Directive; on the other, it allowed measuring the extent to which the Directive has affected the national legal frameworks across the EU. The latter result was instrumental for the attribution of the legal changes to the Directive, and the classification of the Member States in homogenous groups for the quantitative analysis (as illustrated in the next sections).

This section is structured over four thematic areas, and namely:

- Section 3.1 deals with e-invoicing;
- Section 3.2 deals with the rules on invoice issuance and content;
- Section 3.3 deals with other provisions (i.e. cash accounting and VAT chargeability);
- Section 3.4 deals with archiving provisions.

For each thematic area (with the partial exception of the archiving rules, which were not amended by the Directive despite the Commission's proposal), the analysis is structured over the following steps: (i) a description of how the SID has amended the previous invoicing rules; (ii) the assessment of the correctness of the transposition of each Directive's provision; (iii) the review of extent to which the national legal frameworks have changed because of the Directive, including the eventual implementation of optional provisions (whenever relevant); and (iv) an overall assessment⁹ of the extent to which the change can be attributed to the Directive or to other factors. The analysis of transposition and implementation relies on the findings obtained from the local network of legal consultants, complemented by an extensive desk research over primary and secondary legal sources, and validated by the tax authorities.

3.1 e-Invoicing

The analysis of the transposition and implementation of the Directive rules concerning e-invoicing is structured over the following provisions or groups thereof:

- 1) the **e-invoice definition**;
- 2) the principle of **technological neutrality** for e-invoice technologies;
- 3) the principle of **equal treatment between paper and e-invoices**; and
- 4) **other provisions**.

With one minor exception¹⁰, there are no optional regimes to be assessed.

3.1.1 e-Invoice definition

The Directive modifies the definition of e-invoice as '*an invoice that contains the information required in this Directive, and which has been issued and received in any electronic form*' (Article 217). In the previous version of this article, only the transmission of an invoice 'by electronic means' was defined. As further clarified in the

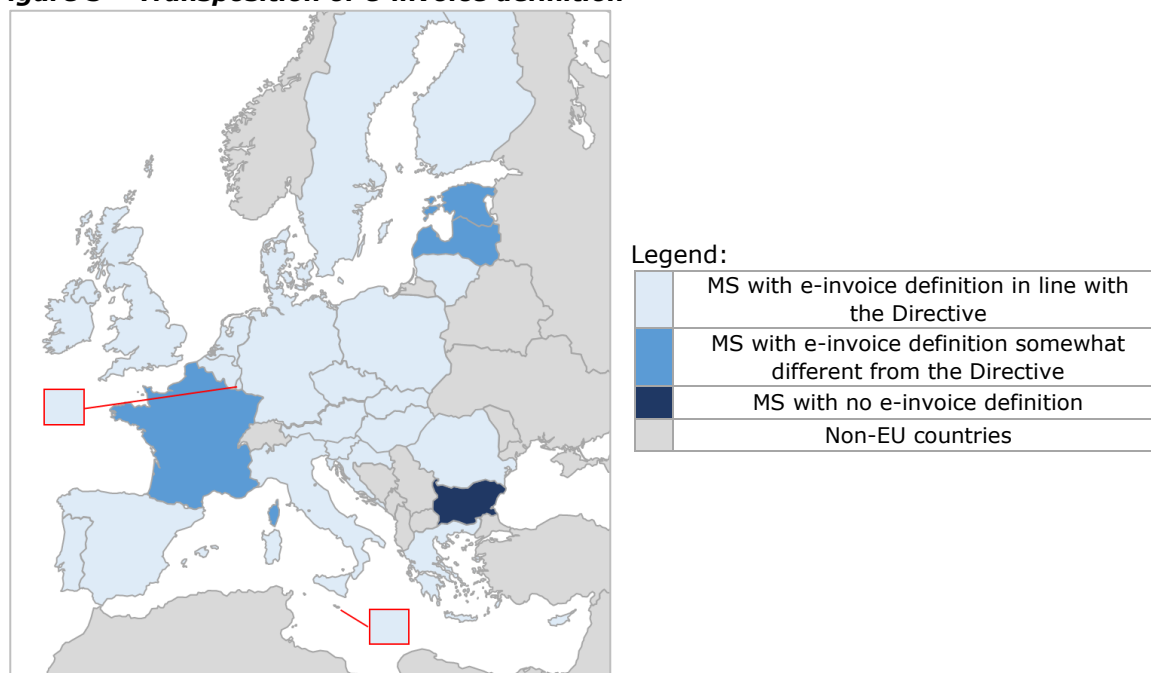
⁹ The analysis is nuanced across the various areas. In particular, the number of optional regimes are of limited importance for e-invoicing; with respect to archiving, the Directive basically left the legal framework unaltered, hence, the analysis of transposition and of the legal change plays a marginal role.

¹⁰ Article 247(2), dealt with in Section 3.4 below.

Explanatory Notes¹¹, the Directive does not prescribe any specific electronic form, and thus includes 'invoices as structured messages (such as XML) or other types of electronic formats (such as an email with a PDF attachment or a fax received in electronic not paper format)'. Such a broad e-invoice definition differs from the one provided by the Directive 2014/55 on electronic invoicing in public procurement¹², which exclusively encompasses structured formats¹³.

Currently, in all Member States but Bulgaria, the VAT national legislation provides for a definition of e-invoice. In many cases, this represents a significant regulatory improvement, as an e-invoice definition was previously lacking. **In 24 Member States, the e-invoice definition in the national legislation mirrors the one of the Directive**, or, in a minority of cases, is enriched with examples of acceptable electronic formats, encompassing both structured and unstructured messages¹⁴. Three Member States adopt an e-invoice definition somewhat diverging from the Directive. These include: (i) Latvia, where emphasis remains on the transmission mode 'by electronic means', (ii) Estonia, exclusively considering 'machine-processable' (structured) invoices as electronic ones, and (iii) France, requiring the whole invoicing process to be in electronic form, including not only issuance and reception, but also the creation and archiving (however, some flexibility to such strict approach has been applied and extended until end 2018, for SMEs, and end 2019, for micro enterprises).

Figure 3 – Transposition of e-invoice definition



Source: Authors' own elaboration.

¹¹ European Commission (2011), Explanatory Notes – VAT Invoicing Rules Directive 2010/45/EU. Hereinafter, 'Explanatory Notes'.

¹² Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic invoicing in public procurement. Hereinafter, 'Directive 2014/55' or 'Directive on e-invoicing in public procurement'.

¹³ Directive 2014/55 defines an e-invoice as follows 'an invoice that has been issued, transmitted and received in a structured electronic format which allows for its automatic and electronic processing' (underlineation added). Cf. Section 7 below.

¹⁴ For instance, this is the case in Austria (e-mail invoicing), in Croatia (XML and PDF), in Romania (XML and PDF), and in Germany (e-mail or de-mail, computer fax via Web download or EDI).

3.1.2 Technological neutrality

Article 233 establishes that the taxable person can determine 'the way' to ensure Integrity and Authenticity (I&A)¹⁵ of e-invoices (as well as of paper-based ones). The Directive provides three examples of approaches to ensure I&A, namely: (i) technological solutions integrated by controlled data exchanges, i.e. Electronic Data Interchange (EDI), (ii) technological solutions integrated by data level controls, i.e. Qualified Electronic Signature (QES), and (iii) 'Business Controls that create a reliable Audit Trail' (BCAT) between the invoice and the corresponding supply of goods or services.

The technology neutrality principle has been uniformly transposed in the EU, as no Member State establishes the use of particular technologies for e-invoicing. The technological solutions listed in the Directive continue to be explicitly mentioned in the amended VAT legislation, including secondary regulations¹⁶ and other administrative documents (circulars)¹⁷, of the majority of Member States as available options (thus, representing 'safe havens'). Currently, the adoption of BCAT for ensuring the I&A of e-invoices is mentioned (and often designated as the default rule) in the national legislation of all Member States but Estonia, Luxembourg, Sweden, and UK, whose VAT law remains agnostic to the possible methods to be used. Still, in the case of Luxembourg and UK, BCAT (as well as other possible methods to prove e-invoice I&A) are specified in guidance notes¹⁸. EDI and QES are specifically mentioned in 24 and 18 Member States, respectively¹⁹. Overall, the vast majority of Member States (24) awards a presumption of compliance with I&A requirements by means of e-signatures. Indeed, Advanced Electronic Signature (AES) is currently explicitly mentioned, and thus regarded as a sufficient option to demonstrate I&A, in the national VAT legislation of 10 Member States (Austria, Belgium, Croatia, Greece, Ireland, Lithuania, Portugal, Slovenia, Spain, and UK)²⁰. Specific national requirements on the use of e-signatures, such as the use of a signature and/or a timestamp provided by a certified service provider, were previously applied by a few Member States (Germany, Italy and Hungary), and have been invariably removed. Finally, in a minority of Member States (5), the national legislation explicitly refers to accepted technological solutions in addition to EDI and e-signature²¹.

¹⁵ 'Authenticity' of the origin of an e-invoice means the assurance of the identity of the supplier or the issuer of the invoice, while the 'Integrity' of content means that the content required according to the Directive has not been altered.

¹⁶ In Ireland the ongoing acceptance of other methods used under previous regime is described in European Union (Value-Added Tax) Regulations 2012, Statutory Instruments No. 354.

¹⁷ This is the case of Belgium (Circular letter concerning e-invoicing, AAFisc Nr. 14/2014).

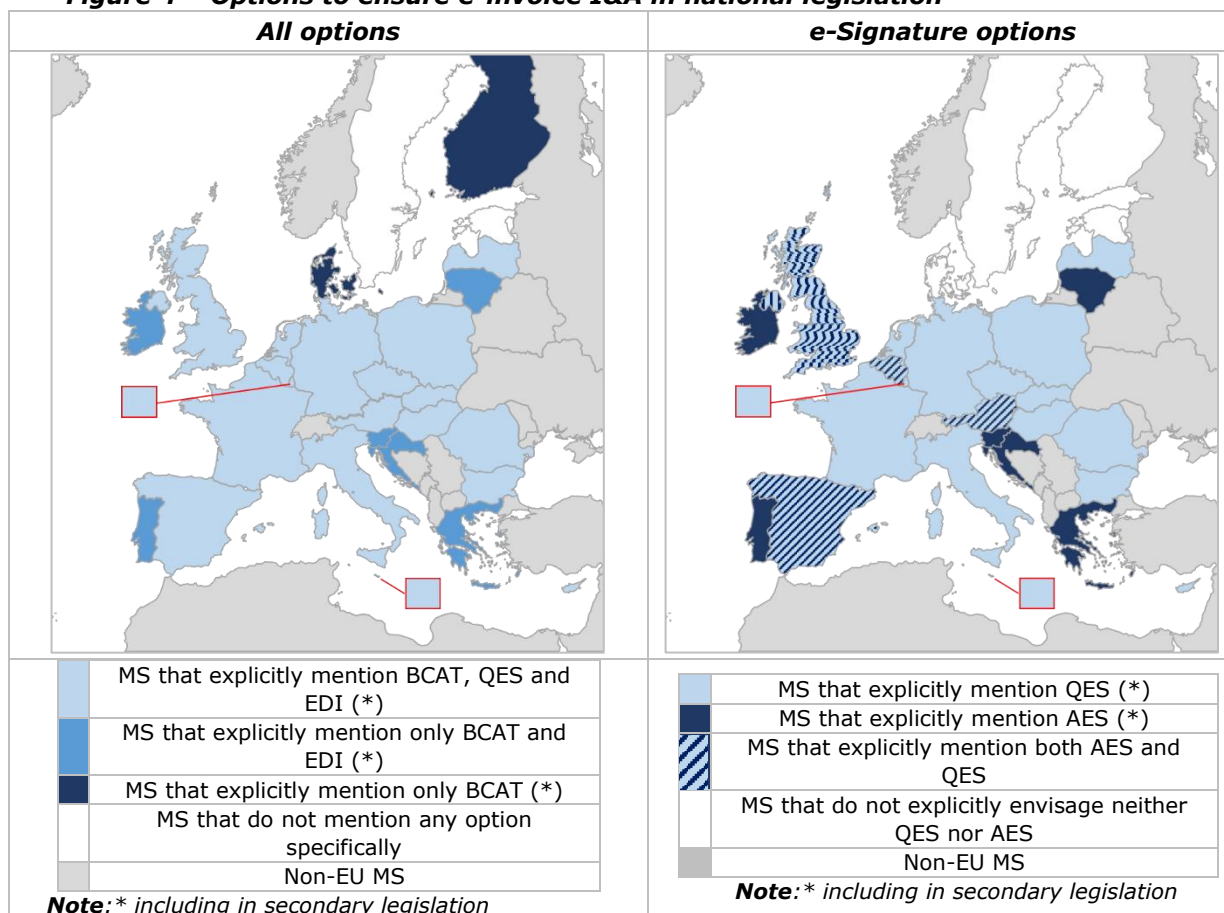
¹⁸ UK, HMRC VAT Notice 700/63: electronic invoicing (April 2014); Luxembourg, Circular that the direction of the VAT Authorities issued on 4 April 2013 upon the official publication of the law of 29 March 2013 (implementing Directive 2010/45).

¹⁹ Prior to the change of the Directive, 17 Member States explicitly mentioned QES as a method to ensure compliance with I&A requirements – even though this was not required by the Directive.

²⁰ In Hungary, based on unofficial guidance, advanced e-signature is sufficient.

²¹ The five Member States explicitly mentioning additional solutions to prove e-invoice I&A in the national VAT legislation include: (i) Austria (invoices delivered through a 'Business Service Portal' and PEPPOL), (ii) Greece (the clearance of sales transactions through a payment service provider that is under the supervision of the Bank of Greece, under law 3862/2010, and the use of Electronic Tax Equipment, as specified by the Secretary General pursuant to Article 12(8) and (9)), (iii) Czech Republic (recognised electronic mark/seal based on an official system certificate), (iv) Portugal (electronic seals according to Regulation 910/2014), and (v) UK (security of networks/communication links, access controls, and message transfer protocols, for example, http-s).

Figure 4 – Options to ensure e-invoice I&A in national legislation

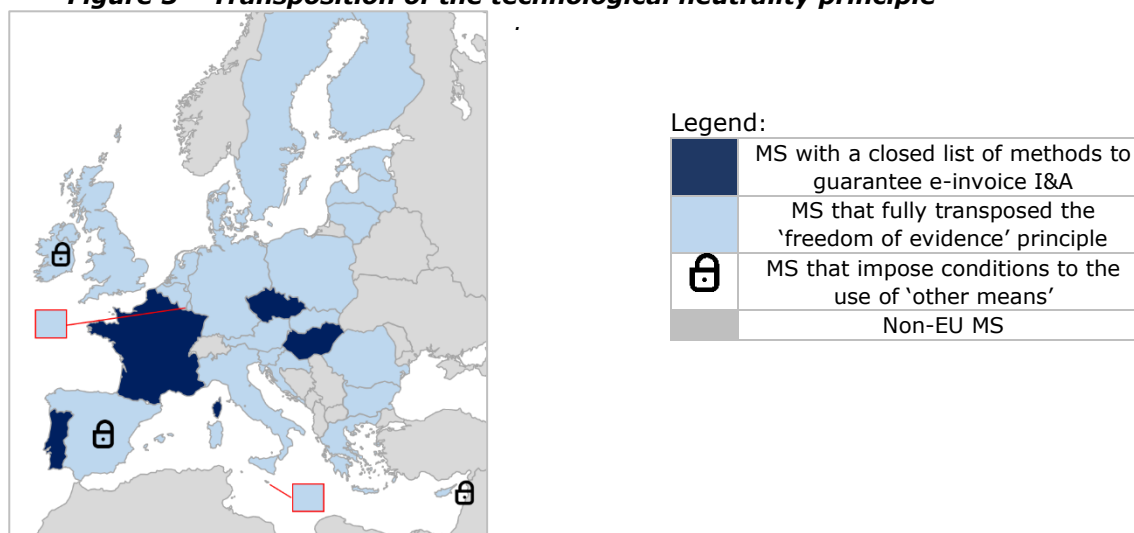


Source: Authors' own elaboration.

Four Member States adopt a comparatively less open approach, as they only accept the e-invoicing solutions explicitly mentioned in their legislation. However, the options foreseen are defined broadly enough to ensure the taxpayers' freedom of choice de facto. In most of Member States (24), any means for ensuring I&A of e-invoices is currently accepted without further conditions. Still, in three of these countries, the adoption of a solution different from the one mentioned in the national legislation requires a prior consultation and validation (Cyprus and Spain) or a notification (Ireland) of the proposed method by the tax authority. In the other four Member States (i.e. Czech Republic, France, Hungary and Portugal), the use of a solution to ensure e-invoice I&A different from those specified in the 'closed' list foreseen in the national legislation is not accepted²². Thus, the proper transposition of the freedom of evidence principle in the amended VAT legislations is somewhat questionable. However, it is worth noting that the inclusion of the BCAT option in these lists, in practice, allows using any technology that taxpayers may consider appropriate to automate their invoicing process.

²² See for the Czech Republic: Amendment no. 502/2012 of the Law no. 235/2004, §34 (3) and (4); for France: Article 62 of the Law no. 2012-1510 of 29 December 2012; for Hungary: Article 138 of Act CLXXVIII of 2012 on VAT; and for Portugal: Article 3 of Decree-law 196 of 2007.

Figure 5 – Transposition of the technological neutrality principle



Source: Authors' own elaboration.

3.1.3 Equal treatment between paper and e-invoices

As prescribed by the Directive, legislative requirements on e-invoices beyond those that exist for paper invoices were removed in all Member States which had provided for them. Prior to the transposition of the Directive, four Member States - Cyprus, Ireland, France, and the Netherlands – imposed to taxpayers some sort of prior notification to the tax authority in order to issue e-invoices. For instance, in the Netherlands, taxpayers were required to present to the tax office the trading partners agreement on e-invoicing, and to inform the tax authority of the intention to use an e-invoicing solution; in France, businesses willing to exchange e-invoices using an e-signature²³ or EDI²⁴ were obliged to inform the tax authority by attaching a specific information to their annual statements of income. All these legal requirements have been invariably removed, in line with the Directive principle that tax authorities should be indifferent about whether a taxable person chooses to issue paper or e-invoices. Consistently, and even though not being formally modified by the Directive, the national approach towards the requirement of e-invoice acceptance by the recipient was further relaxed, as summarized in Box 2.

Box 2 – e-Invoice acceptance

Opposite to what was originally foreseen in the Directive Proposal, the use of an e-invoice remains subject to acceptance by the recipient²⁵. Accordingly, **this requirement is still imposed by all Member States.** However, as the method for acceptance is not further defined, in practice, tacit and implicit approvals would fulfil this requirement (for instance, the processing and paying of an invoice that has been sent in electronic format). Prior to the transposition of the Directive, **an explicit customer acceptance of an e-invoice was required in seven Member States. This number has now declined to four** (Estonia, Greece, Portugal, and Slovenia), while in all other Member States tacit acceptance is sufficient. Notably, among those requiring an explicit acceptance, Estonia has set up, since March 2017, a Commercial Register with public information regarding every business's (registered in Estonia) willingness to accept e-invoices or not. In case a company is labelled as accepting e-invoices, it means that it is equipped with the programs needed for dealing with e-invoices, and there is no need to make any additional agreement. In the other three countries where this requirement is still applied, the tax authorities reported large flexibility in the form of the explicit acceptance including electronic modalities, such as merely by subscribing online (e.g. in the supplier's website).

²³ See the Tax Code version applicable from August 31, 2003 to April 27, 2013, Annex III, article 96 F 5.

²⁴ See Tax Code, Annex IV, article 41 octies.

²⁵ Article 232: 'The use of an electronic invoice shall be subject to acceptance by the recipient'.

A few Member States introduced requirements that exclusively affect the use of e-invoicing, such as the obligation to certify the software used to create e-invoices or the preliminary authorization for outsourcing e-invoicing to a service provider. In Hungary, since October 2014, an invoicing software must provide certain types of information and has to be notified to the tax authority within thirty days following the date of purchase or the date of installation²⁶. In Portugal, each invoicing software and any updates have to be audited and certified by the tax authority, with only minor exemptions (e.g. for taxable persons with an annual turnover of less than EUR 100,000)²⁷. The certification applies to invoicing software in general, hence irrespectively of the paper or electronic form. In Czech Republic, when using a service provider, it is required to explicitly authorize the outsourcing of e-invoice issuance; if the authorization is in electronic form, it must be signed with a QES.

3.1.4 Other provisions

EDI provisions. Article 233 of the Directive introduces a minor change with reference to the EDI, that is **the elimination of the optional requirement for a summary document** on paper to be sent to the relevant authority by the taxable person adopting this solution. Such a requirement, previously imposed by two Member States (Austria and Hungary), has been removed. In two other Member States, a somewhat different requirement was previously applied. In France, an electronic document with a list of messages issued and received and a listing of trading partners was and is still required. In Romania, a paper summary document of the EDI system had to be prepared and stored; following the transposition of the Directive, such a requirement has been removed.

I&A data in electronic form. The amended Article 247(2)²⁸ gives Member States – in case of electronic storage of invoices – the option to require the electronic storage of the data guaranteeing I&A. Overall, 15 Member States transposed such option in their national legislation, while in the remaining Member States there is no requirement to ensure that the same form applies to invoices and I&A data. Of the 15 countries which opted for this requirement, four Member States (Austria, Hungary, Lithuania and Slovenia) clarified that, in case I&A is guaranteed via BCAT, paper evidence is also acceptable. Finally, in Malta, data guaranteeing I&A shall also be stored in electronic form, but only upon explicit request from the tax authority.

3.1.5 Summary and attribution of legal changes

The Directive introduced three main changes to the EU legal framework for e-invoices: (i) a new definition; (ii) the principle of technological neutrality; and (iii) the principle of equal treatment. **These norms of principle have been introduced evenly across all the Member States.** Being norms of principle rather than detailed prescriptions, even when the national provisions remain slightly different, there appears not to be any problem of incorrect transposition.

The legal change in the national legal frameworks remains uneven. In particular, both the technological neutrality and the equal treatment principles were already in

²⁶ See Section 11 of Decree No. 23/2014 (VI. 30.) NGM on the Tax Identification of Invoices and Receipts, and on the Supervision by the Tax Authority of Electronically Stored Invoices.

²⁷ See Ordinance 363 of 23 June 2010, which underwent various modifications over time reducing the scope of exemptions, such as the reduction of the annual turnover below which no software certification is required from EUR 150,000 to 100,000 in Ordinance 340 of 22 November 2013.

²⁸ 'Additionally, in the case of invoices stored by electronic means, the Member State may require that the data guaranteeing the authenticity of the origin of the invoices and the integrity of their content, as provided for in the first paragraph of Article 246, also be stored by electronic means'.

force in several Member States (e.g. Denmark, Finland, Estonia and Sweden). At the same time, the joint effect of these two principles and the new definition were instrumental to the introduction of legal changes in a large number of Member States. On the one side, they led to the removal of national additional requirements on e-invoices (e.g. in Germany or Italy). On the other side, they granted the e-invoices, including most importantly PDF documents sent via mail, the status of valid documents for VAT deduction purpose in countries where this was unclear or business were reluctant to rely on these tools (e.g. in Romania or Poland). **All these changes come primarily, if not solely, from the SID provisions**, as both the equal treatment and the 'change of status' for e-invoices happened immediately after its transposition into the national legal frameworks.

3.2 Invoicing issuance and content

The changes to the rules on invoicing issuance and content represent the largest group of provisions covered by the Evaluation. For clarity of analysis, they have been classified into three sub-groups, namely:

- 1) rules on **standard invoices**;
- 2) rules on **specific invoicing regimes**; and
- 3) **cross-border provisions**.

3.2.1 The changes introduced by the Directive

The Directive encompasses a number of interventions in the area of invoicing issuance and content by (i) introducing new provisions, such as Article 219a on the applicable national framework; (ii) amending existing provisions, such as on invoice content; and (iii) harmonising optional regimes or prohibiting national additional requirements, thus limiting Member States' discretionary powers.

3.2.1.1 Standard invoices

As for standard invoices, the Directive introduces two main changes:

- **Content of standard invoices** (Article 226). The Directive adds or simplifies some clauses to be included in standard invoices, and namely:
 - it introduces three additional clauses for the identification of the applicable regimes: (i) 'cash accounting'; (ii) 'self-billing'; and (iii) 'reverse charge';
 - it simplifies two clauses – items 13 and 14 – that have to be included when certain margin schemes are applied, i.e. those for travel agents and second-hand goods / works of art / collector's items and antiques.
- **Supplies of financial services**. According to the new Article 220(2), the issuance of an invoice is not required for VAT-exempt supplies of financial services²⁹. In accordance with Article 221(2), the Member States may require a VAT-compliant invoice for domestic or extra-EU supplies of financial services. As a consequence, no invoice can be requested in case of intra-EU supplies. Under the previous version of the VAT Directive, all exempt supplies, including those of financial services, were dealt with by Article 221, which stated that Member States were free not to require an invoice for the provision of VAT-exempt goods or services.

²⁹ As mentioned in points (a) to (g) of Article 135, which include: (a) insurance and reinsurance; (b) credit; (c) credit guarantees; (d) deposits and means of payments excluding debt collection; (e) transactions concerning currency (excluding collectors' items); (f) transactions in securities (but not management or safekeeping); and (g) the management of special investment funds.

3.2.1.2 Specific invoicing regimes

The Directive amends three specific invoicing regimes, and namely the rules on: (i) self-billing; (ii) simplified invoices; and (iii) summary invoices. The changes introduced by the Directive aim at extending the use of these regimes or simplifying them, as well as at ensuring a more uniform application of the relevant rules across the EU³⁰. More specifically:

- **Self-billing invoice** (Article 224). A self-billing invoice can be issued by the customer on behalf of the supplier, provided that: (i) there is a prior agreement between the two parties; and (ii) a procedure exists for the acceptance of each invoice. The Directive removes the possibility for Member States to impose further conditions on the prior agreement and the acceptance procedure³¹.
- **Simplified invoice** (Articles 220a, 226b and 238). A simplified invoice, that is an invoice including less information than a standard one, can be used for domestic transactions of low value or in specific industries³². Prior to the SID, this regime was optional. This is no longer the case, as the new Article 220a requires all Member States to allow simplified invoices when (i) the amount of the transaction is lower than EUR 100; and (ii) for documents or messages treated as an invoice. The minimum content of simplified invoices is defined in Article 226b, and Member States are free to add additional requirements. Article 238 grants Member States the possibility to extend this regime for transactions up to EUR 400 or to specific business sectors.
- **Summary invoice** (Article 223). A summary invoice is a document covering separate supplies of goods or services provided by a taxable person to the same customer. Prior to the SID, Article 223 allowed the Member States in which the transaction took place to impose its own national conditions on the use of summary invoices. The Directive intervenes by (i) removing the possibility to add national conditions; (ii) mandating that summary invoices can cover at least one month of transactions; and (iii) allowing Member States to extend the period that can be covered by summary invoices.

3.2.1.3 Cross-border provisions

The SID introduces a number of changes to the invoicing requirements applicable to cross-border transactions and operators, in view of reducing burdens and increasing harmonisation. The modifications concern the applicable rules, the time of issuance, the content of cross-border invoices, and the payment on accounts for intra-EU supplies. More in details:

- **Applicable rules** (Article 219a). The SID adds a new article clarifying which jurisdiction determines the invoicing rules for cross-border transactions. Prior to the SID, no explicit provision regulated this aspect. Article 219a states that the applicable national invoicing rules – except for those related to storage – follow the determination of the place of transaction³³. However, an exception is introduced to facilitate compliance for the supplier: its own national invoicing

³⁰ Proposal, at p. 7-8; cf. also Explanatory Notes: '[t]he rules on self-billed invoices should have a more uniform application with the removal of many of the options and conditions that MS can apply'.

³¹ Member States remain free to define the form of the prior agreement and the acceptance procedure, e.g. whether they need to be in writing.

³² The Directive aims at creating a 'two-tier system of invoicing', with, on one side, a full VAT invoice, and, on the other, the possibility to opt for a simplified invoice (in particular, when the amount is so low that the budget risk for the Member States is minimal), especially to the benefit of SMEs, which are most likely to engage in small-value transactions. Cf. Proposal, at p.3.

³³ I.e. the rules established in the Title V of the VAT Directive.

rules apply, regardless of the place of transaction, to cross-border supplies when the customer is liable for the payment of the VAT. This exception, however, does not apply to self-billing invoices.

- **Time of issuance** (Article 222). As far as timing is concerned, before the SID, Member States were free to impose any time limit for the issuance of invoices, or none at all. The Directive mandates a single time limit for certain cross-border transactions³⁴. The prescribed limit is the fifteenth day of the month following that in which the chargeable event occurs. For other transactions, Member States remain free to impose any time limit for the issuance of invoices, or none at all.
- **Content of cross-border invoices.** The content of cross-border invoices is modified by the Directive as follows:
 - According to the new Article 226a, when the Member State of establishment of the supplier is not the same one in which the VAT is due and the customer is liable for paying the VAT, **information on the VAT rate and VAT amount payable** can be omitted from the invoice, since the liability to properly account for the VAT rests with the customer. The taxable amount should still be indicated '*by reference to the quantity or extent of the goods or services, and their nature*'.
 - Article 230 prescribes that the amount of the VAT payable or to be adjusted is expressed in the currency of the Member State in which the tax is due. The **currency conversion mechanisms** that can be used to this purpose are listed in Article 91 of the VAT Directive. The SID adds another conversion method therein, i.e. the reference to the latest European Central Bank (ECB) exchange rate³⁵.
 - The Directive removes the possibility for Member States to introduce a general requirement for the **translation of invoices**, by repealing Article 231 and introducing Article 248a, which prescribes that Member States may require the translation of invoices only '*for certain taxable persons or in certain cases*'.
- **Invoice for payment on accounts on intra-EU supplies** (Article 220(1)(4)). The SID removed the obligation for Member States to require an invoice in case of payment of accounts received before an intra-EU supply of good is carried out – a VAT exempt transaction³⁶. Member States remain free to require an invoice for these transactions, based on Article 221(1).

3.2.2 Analysis of transposition

The analysis of the correctness of the transposition of the provisions on invoicing issuance and content has been based on a set of **15 indicators**. These indicators capture (i) **mandatory requirements** (e.g. the principle of applicable jurisdiction enshrined in Article 219a); and (ii) **limits to optional regimes** (e.g. the possibility to apply simplified invoices for transactions carried out by any taxable person only up to EUR 400). In some cases, the indicators required a degree of interpretation of EU and national provisions, as shown in Box 3.

³⁴ Intra-EU acquisition of goods ex Article 138, and supplies of services for which VAT is payable by the customer ex Article 196.

³⁵ As also foreseen prior to the SID, the issuer can still convert the VAT due by making reference to (i) the conversion methods foreseen under the customs legislation; and (ii) the selling rate recorded in the most representative national market.

³⁶ Under Article 220(1)(4), an invoice shall still be required for payments on account made before supplies of goods and service made to another taxable person or a non-taxable legal person, and before distance supplies of goods.

Box 3 – Interpretation of indicators of correct transposition and implementation

While certain indicators are clear-cut, so that the data needed for their assessment can be immediately retrieved from the letter of the national provisions, for a group of indicators the following considerations and assumptions were made:

- **Issuance of invoices – Financial service providers.** If providers of financial services can opt out of the VAT exemption on a voluntary basis, and, thus, have to issue an invoice also for intra-EU supplies, this was considered in line with Article 221(2).
- **Summary invoice.** As the SID removes the clause allowing Member States to define the conditions when a summary invoice could be issued, all limitations to its use were considered as a non-correct implementation of the EU provisions. To the contrary, the documentary burden of proving that the transactions covered by the invoice did take place (for instance, transport slips) were considered as a consequence of the general duty for taxable persons to hold proof of the authenticity of the invoice, and thus in line with Article 223.
- **Self-billing.** In line with the Explanatory Notes³⁷ and doctrine³⁸, a distinction was made between the form of the agreement and acceptance procedure, on one hand, and other requirements, on the other. Indeed, Member States were considered free to determine how an agreement is to be concluded (e.g. explicitly as a separate document, as a set of clauses in a sales agreement, or tacitly based on business practices) and proved in case of controls (e.g. by means of a written document which can attest both parties' consent). The same goes for the acceptance procedure, which can be either explicit or implicit. In addition to this, certain Member States impose conditions that are a consequence of other VAT provisions (such as the prohibition for the supplier to issue the invoice for transactions which have been self-billed, or the duty to apply a sequential numbering to self-billed invoices). All these rules were not considered as additional national requirements. To the contrary, when Member States go beyond these requirements and impose other duties, such as the need to notify the prior agreement to the tax authority or to notarise it, or a limitation of the type of taxable persons or transactions that can be covered, this was considered an additional requirement, thus a case of incorrect transposition.
- **Content of cross-border invoices.** Article 226a allows omitting the following elements in invoices for cross-border transactions in which the VAT is due by the recipient, namely (i) the taxable amount per VAT rate/exemption; (ii) the VAT rate applied; and (iii) the VAT amount payable. However, the taxable amount of these goods or services should still be indicated 'by reference to the quantity or extent of the goods or services, and their nature'. Hence, the transposition check focused only on whether the VAT rate and the VAT payable can be omitted.
- **Translation.** In many Member States, accountancy law requires undertakings established therein to issue all relevant documents, including sales invoices, in the national language (e.g. France, Bulgaria, Croatia), a duty that can be sometimes removed upon authorisation of tax authorities (as in Sweden). However, this requirement does not apply to all VAT invoices, such as those received by local taxable persons or those issued by non-established undertakings. Requirements concerning only invoices issued by locally-established companies were considered as in line with Article 248a.

As shown in Table 2, **the Directive displays a very good level of transposition**. Out of 15 indicators, in 12 cases no Member State was found as non-compliant, while, in other two cases, only two discrepancies between national legal frameworks and the EU provisions were identified. These discrepancies have been verified based on national primary and secondary legislation. One indicator, which is the possibility for taxable persons to issue a simplified invoice for amending documents and messages (e.g. credit notes), deserves a specific treatment. Based on the recognition of the national legislative frameworks, a large number of Member States do not have a specific provision transposing Article 220a(1)(b). However, after further research and the interaction with tax authorities, it was clarified that, in most of the countries, amending documents and messages do not need to include all the information required for VAT invoices, and, hence, can only include a more limited set of information. For this reason, a lack of an explicit national provision transposing Article 220a(1)(b) does not imply its incorrect transposition³⁹.

³⁷ Explanatory Notes, Document reference: B-4, Topic: Self-billed invoices.

³⁸ Annacondia, F. (ed.) (2017), EU VAT Compass 2017/18, IBFD. Hereinafter, the 'VAT Compass'; At §11.2.3. The jurisprudence has been researched to verify whether the CJEU had been called to interpret this provision, but no relevant case could be found.

³⁹ For 3 Member States, neither an explicit mention of the use of simplified invoices for amending documents in the primary or secondary legislation nor the confirmation of tax authorities that this practice is lawful could be obtained: Cyprus, Estonia, and the UK.

Table 2 – Directive transposition: Invoicing issuance and content

Provision	Indicator	Incorrect transposition
Standard invoice		
Content of standard invoices	Amended clauses on cash accounting, self-billing, reverse charge, margin schemes	0
Financial Services	Invoice not required for intra-EU financial services	0
Specific invoicing regimes		
Simplified invoices	Simplified invoice allowed for minor (< EUR100) transactions	2
	Simplified invoice allowed for amending documents and messages	-
	Details on a simplified invoice beyond those in Articles 226, 227, 230	0
	Simplified invoice not allowed for transactions above EUR 400	0
Self-billing	No additional requirements on prior agreement	2
Summary invoice	No additional conditions on summary invoice issuance	0
	Minimum period one month	0
	No additional requirements on acceptance procedure	0
Cross-border provisions		
Applicable Jurisdiction	Invoicing rules are in line with the new Article 219a	0
Time limit	Time limit for intra-EU transactions on 15 th day of the following month	0
Content of cross-border invoices	Allowed to omit the VAT rate and the VAT amount for reverse charge transactions	0
Currency conversion	Allowed to use ECB exchange rate	0
Translation	No requirement for all invoices to be translated into national language	0

Source: Authors' own elaboration.

3.2.3 Changes in national frameworks and implementation of optional provisions

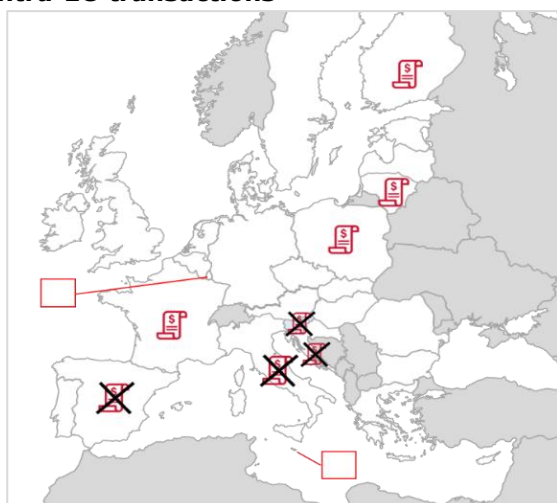
3.2.3.1 Standard invoices

Content of standard invoices. The new rules on the content of standard invoices requires Member States to adapt their legislation to the new clauses on e.g. self-billing, reverse charge, and, where applicable, cash accounting. As the revised Article 226 has been correctly transposed throughout the EU, **the scope of legal changes includes all the 28 EU countries.**

Issuance by financial service providers. The Directive explicitly prohibits Member States from requiring invoices from providers of financial services⁴⁰ in case of intra-EU transactions. As shown in Table 2 above, **this requirement is respected by all EU countries.** Apart from intra-EU transactions, four Member States (Finland, France, Lithuania, and Poland) still require invoices from financial services providers under specific conditions – such as for certain Business-to-Business (B2B) transactions or upon customer's request. To the contrary, four other Member States (Croatia, Italy, Slovenia and Spain) have removed the obligation to issue an invoice for VAT-exempt transactions for financial service providers, even though, the Directive did not mandate such a simplification. The situation is summarised in Figure 6.

⁴⁰ Precisely, providers of services listed in letters a) to g) of Article 135(1).

Figure 6 – Legal changes on invoicing obligations for financial services providers for intra-EU transactions



Legend:

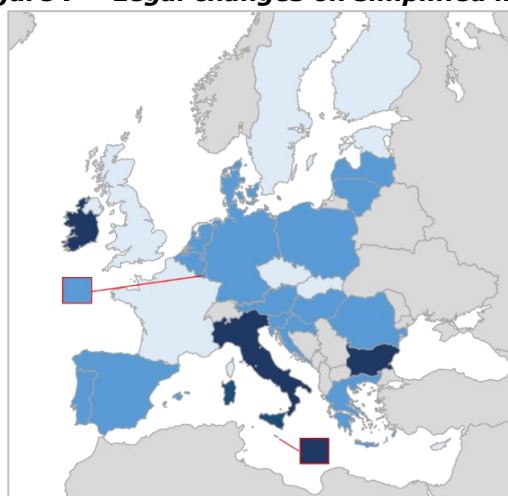
	MS that do not require invoices from financial services providers for intra-EU transactions
	MS that require invoices from financial services providers under specific circumstances
	MS that removed the invoicing requirement for financial services providers after the SID
	Non-EU countries

Source: Authors' own elaboration.

3.2.3.2 Specific invoicing regimes

Simplified invoice. As prescribed by the Directive, all Member States now allow for simplified invoices. Twenty-four Member States already did so when it was an optional regime, while **four Member States introduced the possibility to issue simplified invoices following the transposition of the SID** (Bulgaria, Ireland, Italy, and Malta). Sixteen Member States, where simplified invoices were already allowed, go beyond the minimum requirements, and allow simplified invoices to be used also in other circumstances, namely: (i) for transactions the value of which is between EUR 100 and 400, in 10 Member States; (ii) for specific business sectors, in 10 Member States; and (iii) in other cases, e.g. when the business practices make it difficult to issue a standard invoice, in five Member States. Information on the legal changes at national level are summarised in Figure 7. As far as the content of simplified invoices is concerned, most countries (18) go beyond the minimum requirements listed in Article 226b. However, the gold-plating has been limited, as 1.5 additional items are prescribed at national level, on average. Five Member States have increased the pieces of information to be included in the simplified invoice following the increase in scope mandated by the Directive.

Figure 7 – Legal changes on simplified invoices



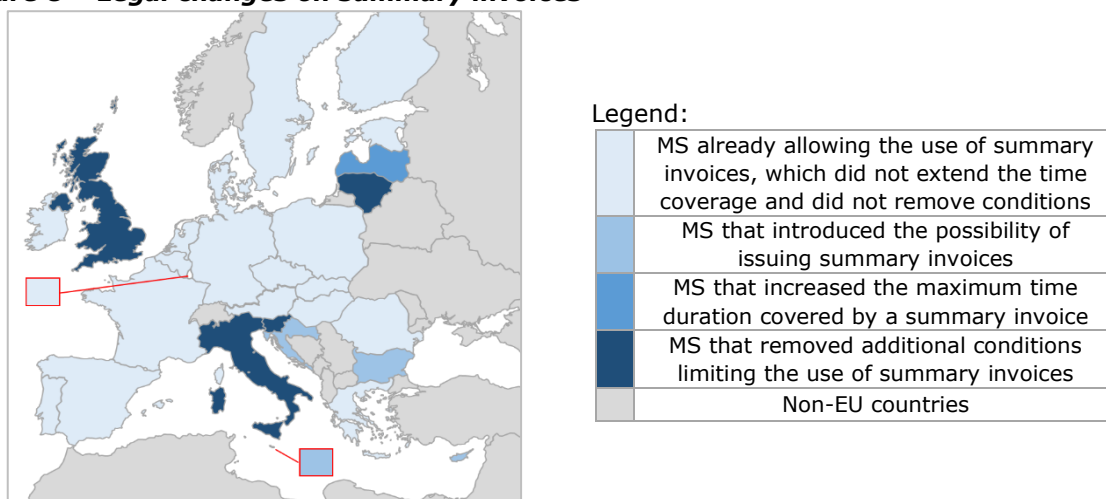
Legend:

	MS that already envisaged the possibility of issuing simplified invoices and did not enlarge the scope
	MS that enlarged the scope of simplified invoices
	MS that introduced the possibility of issuing simplified invoices
	Non-EU countries

Source: Authors' own elaboration.

Summary invoice. The possibility of issuing a summary invoice was already granted in 24 Member States. Following the Directive, **summary invoices were introduced also in the remaining four Member States** (Bulgaria, Cyprus, Croatia, and Malta). In line with the revised Article 223, **all EU countries allow summary invoices to cover at least one month of supplies**; in 17 Member States, one month represents the maximum period allowed. The Directive also led to the removal of the additional conditions that could limit its use (e.g. to specific types of transactions or business sectors), although they were not widespread in the first instance – as only four Member States imposed them prior to the SID⁴¹. The situation is summarised in Figure 8.

Figure 8 – Legal changes on summary invoices



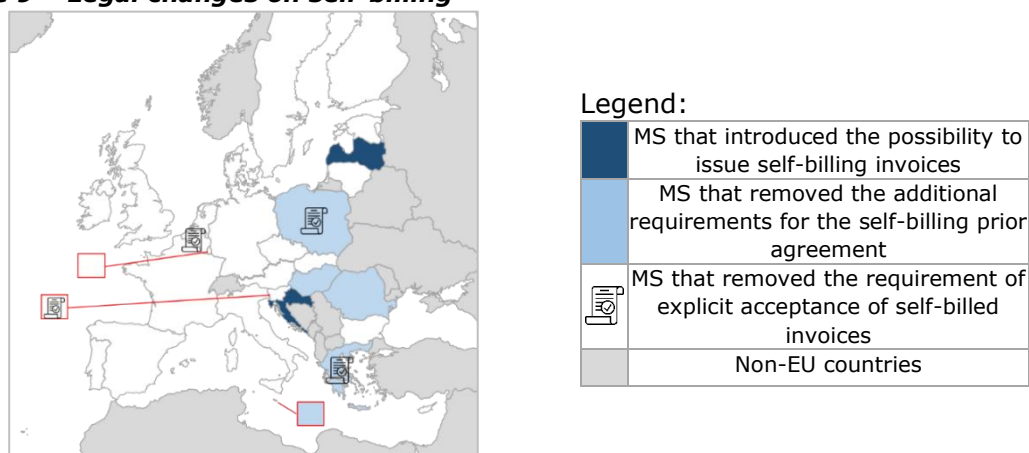
Source: Authors' own elaboration.

Self-billing. The possibility for customers or third parties to issue an invoice on behalf of the supplier was granted almost in all EU countries already prior to the SID. The only exceptions were Latvia and Croatia (the latter was obviously not bound by the EU acquis in 2010). Currently, **in the vast majority of Member States, such a possibility requires an explicit prior agreement between the parties**. More specifically, 20 Member States have such a requirement, either in form of a direct obligation to conclude the agreement in writing, or as an indirect obligation to prove its existence in case of controls. In comparison with the situation before the SID, little has changed in this respect, since only Luxembourg and Malta removed the duty for the prior agreement to be explicit. The situation is different for the acceptance procedure, which had to be explicit only in four countries, while it currently does not have to be in any Member State⁴². **Further requirements** – such as the duty to notify the tax authority of the prior agreement, or to ask for an authorisation, or to conclude the agreement before a notary – **were in place in seven countries** (Bulgaria, Cyprus, Greece, Hungary, Malta, Poland, and Romania), **and were removed in all of them except for two**. Additional requirements on the acceptance procedure were not in place in any Member State, and have not been subsequently introduced.

⁴¹ As discussed in Box 3 above, the duty for taxable persons to keep track of the specific transactions covered by the summary invoice, e.g. via transport documents or delivery slips, has been considered as part of the general duty to prove the authenticity of an invoice, and not as an additional requirement to summary invoices. Among the Member States covered in-depth, summary invoices must be accompanied by such documents e.g. in Romania, Italy and Portugal; this requirement has been lifted in France.

⁴² In several Member States (e.g. BE, CZ, IE) a requirement exists so that the parties have to specify the conditions for acceptance in the prior agreement, including whether it can be implicit, or must commit, in the prior agreement, to accept all invoices. This however, in the practice, does not undermine the parties' freedom to determine in the prior agreement that tacit acceptance remains sufficient.

Figure 9 – Legal changes on self-billing



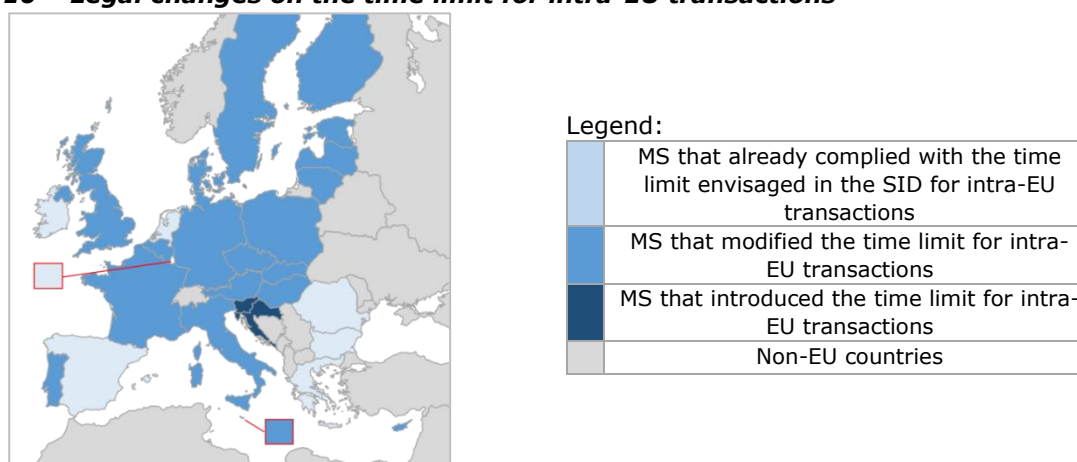
Source: Authors' own elaboration.

3.2.3.3 Cross-border provisions

Applicable jurisdiction. *In all Member States, the rules determining the application of national invoicing requirements are considered in line with the new Article 219a.* Prior to the SID, in 16 countries national invoicing rules would apply to taxable persons established (or in some cases registered) therein, while in nine Member States the application of national invoicing rules would follow the determination of the place of transaction – a principle very close to that established in the newly introduced Article 219a⁴³.

Time limit. Prior to the SID, *a time limit for the issuance of invoices existed in 26 countries*, the exceptions being Croatia and Slovenia. *Time limits were very diverse*, ranging from 'immediately upon supply' (in France, Italy⁴⁴, and Lithuania), up to six months (in Austria and Germany). The most common limit was the 15th (or 16th) of the month following the chargeable event, which was in force in seven Member States. Following the adoption of the SID, *a time limit for intra-EU transactions was introduced in Croatia and Slovenia, while 19 Member States had to modify their previous limit* (as shown in Figure 10 below).

Figure 10 – Legal changes on the time limit for intra-EU transactions



Source: Authors' own elaboration.

⁴³ In three Member States, it was not possible to identify the rules – possibly implicit - in place before the transposition of the SID.

⁴⁴ In Italy, the limit has recently been amended. As of 01 July 2019, the new time limit for the issuance of an invoice is set on the 10th day following the occurrence of the chargeable event. Cf. Article 11 of *Decreto Legge* 23 October 2018, n. 119, *Disposizioni urgenti in materia fiscale e finanziaria*.

Content of cross-border invoices. The Directive introduced several changes to the content and format of invoices for cross-border transactions, which have impacted on the national frameworks as follow:

- **Information that can be omitted in certain cross-border invoices.** As shown in Table 2 above, *all EU countries allow omitting the VAT rate and the VAT amount due* from those invoices. Prior to the Directive, 16 Member States had already spontaneously introduced such a simplification (not applicable in Croatia).
- **Currency conversion.** Following the transposition of the Directive, *the use of the exchange rate published by the ECB is now possible in all EU countries*, compared to the 10 Member States in which this was possible prior to the SID⁴⁵.
- **Translation.** *A general requirement to translate any VAT invoice, both issued and received, was not in force in any EU country even prior to the SID.* Tax authorities would request a translation whenever necessary for audit purposes. However, based on accounting laws rather than VAT legislation, *a general requirement to issue invoices in the local languages existed in five Member States*, namely Bulgaria, France, Lithuania, Poland, and Portugal. *Such a requirement was removed in Poland and Portugal*, by means of administrative rules and tax rulings which were not connected to the implementation of the Directive. In all other countries, the language requirements for invoices were not modified.

3.2.4 Summary and attribution of legal changes

The Directive caused a number of changes in the national invoicing legislations. For some of them, the causation link is direct, as they were **mandated by the Directive** (e.g. the changes to the clauses to be included in standard invoices or the introduction of simplified invoices up to EUR 100). In some other cases, the Directive offers the possibility for Member States to introduce **optional simplifications**, such as the possibility to allow simplified invoices between EUR 100 and 400 or to remove the obligation to issue an invoice for payment on accounts for intra-EU supplies. Also for these changes, the causation link is straightforward, as such options are stated in the Directive. In addition, the revision of invoicing rules triggered by the Directive also fostered Member States to introduce **additional simplifications**. These include: (i) the removal of the obligation to provide an invoice for all supplies of financial services; (ii) the removal of the requirement for a written prior agreement for or acceptance of self-billing invoices; and (iii) the revision of the time limit for the issuance of invoices for domestic transactions. Several tax authorities have indeed expressed the view that the Directive was instrumental in causing these additional changes, most of which were then included in the national transposition acts, as it worked as a trigger to review the overall invoicing framework. Hence, these changes are also caused by the Directive, though in an indirect way.

Clearly, not all Member States made use of the optional provisions or introduced more simplifications than those prescribed in the Directive. Most importantly, for mandatory, optional and additional simplifications, the extent of the changes caused depends on how the previous national legislation was framed. Hence, **the Directive had an uneven impact on the national legal frameworks**, both in terms how each change affected a varying number of Member States, and in terms of the how much each

⁴⁵ Other methods were, and still are, allowed in most of Member States, and namely (i) the rate established in the most representative market in 13 Member States, (ii) customs rules in 16 Member States, and (iii) other methods in 9 Member States (most of them allow for multiple methods).

Member State had to modify its national legislation, as illustrated by the above analysis, and shortly summarised below.

Per provision. Few of the amendments introduced by the SID had an impact in all or most Member States. For three provisions, most of national legislations were already in line with the SID, and changes occurred in less than ten Member States. These include the requirements to translate all invoices, the removal of the duty for providers of financial services to issue an invoice for intra-EU transactions, and the changes to the regime of summary invoicing. For four of the Directive provisions, the change concerned between 10 and 19 Member States. These include changes to the self-billing regime, and a number of cross-border provisions (those on the applicable jurisdiction, currency conversion, and the possibility to omit certain details in cross-border invoices). Finally, for three more provisions, the changes concern 20 Member States or more, such as in the case of simplified invoices and time limits for intra-EU transactions, or even the whole EU – as for the modification to the clauses to be included in standard invoices.

Box 4 – Prioritisation of provisions in the area of invoicing issuance and content

The provisions in the area of invoicing issuance and content were prioritised based on the extent of legal change (i.e. the number of Member States in which they caused a change to the national framework) and the local VAT practitioners’ perception of whether they had affected the behaviour of companies. The prioritisation (shown in Table 3 below) was necessary to determine which of these provisions had to be subject to a more thorough and quantitative analysis, or to a qualitative assessment, because of their significantly higher number compared to the other areas of the SID.

Table 3 – Invoicing issuance and content: Prioritisation of provisions

Provision (and Article)	Prioritisation
Applicable jurisdiction – Article 219a	Substantive
Issuance - Insurance and financial services – Articles 220.2, 221.2	Minor
Invoice on payments on accounts for intra-EU supplies – Article 220.1.4	Minor
Simplified Invoice – Articles 220a, 226b, 238	Substantive
Timing – Article 222	Substantive
Summary Invoice – Article 223	Minor
Self-billing – Article 224	Substantive
Content - Standard Invoices – Article 226	Minor
Content - cross-border supply with reverse charge – Article 226a	Minor
Currency conversion – Articles 91, 230	Minor
Translation – Article 248a	Negligible

Source: Authors’ own elaboration.

Per Member State. Equally, the Member States had to introduce a varying number of amendments into their national legislation, depending on the extent to which their framework was already in line with the new provisions. **On average, each Member State amended five of the provisions described above**, with ten Member States amending six or more. Obviously, the highest number of legal changes were introduced by Croatia (8), which was not bound by the First Invoicing Directive; following that, Hungary, Malta, and Slovenia amended seven provisions. On the other end of the spectrum, the Czech Republic, Denmark, Estonia, Ireland and Slovakia amended three provisions only.

3.3 Legal mapping: Other provisions

3.3.1 Cash accounting

As a general principle the VAT becomes chargeable when the supply of goods or services takes place⁴⁶. The VAT Directive provides for a number of derogations to this principle. One of the optional derogations consists in the '**cash accounting scheme**', a regime for which the VAT becomes chargeable upon receiving the payment for the transaction, rather than upon the supply taking place or the invoice being issued⁴⁷.

The cash accounting scheme could already be introduced prior to the SID; the Directive then granted the Member States the possibility to introduce the so-called '**combined cash accounting**' for certain micro-enterprises, i.e. a regime through which both VAT payment and deduction are linked to respectively receiving and paying the price of the supplies (in Article 167a). A Member State that envisages the postponement of VAT deductibility shall notify it to the VAT Committee⁴⁸ and set an annual turnover threshold below which taxable persons can apply for the scheme (maximum EUR 500,000, with the possibility of increasing it up to EUR 2 million subject to consultation with the VAT Committee). Prior to the amendments brought by the SID, no specific provision concerned the possibility to postpone the VAT deductibility⁴⁹.

Analysis of transposition. As Article 167a is an optional feature of an already optional regime, there is a limited number of prescriptions that Member States have to comply with. Accordingly, the analysis was based on **two indicators**, namely: (i) whether each Member State respects the maximum annual turnover threshold (EUR 2,000,000); and (ii) whether each Member State which, after the adoption of the Directive, has introduced a threshold between EUR 500,000 and 2,000,000, has consulted the VAT Committee.

The analysis of transposition shows that no Member State adopts a threshold higher than EUR 2,000,000. As for the duty to consult the VAT Committee, seven Member States – Greece, Spain, Ireland, Italy, Malta, Poland, and the United Kingdom – adopt a threshold higher than EUR 500,000. Greece, Spain, and Italy have consulted the VAT Committee in line with the Directive provisions; as for Malta, Ireland, Poland, and the United Kingdom, such a threshold was already in place before the SID. Hence, **the analysis of transposition and compliance shows no discrepancies between EU prescriptions and the national legal frameworks.**

Changes in national legal frameworks. The cash accounting regime targeting micro enterprises is widespread in the EU, as it is foreseen in 22 Member States, which are all but for Belgium, Czech Republic, Denmark, France, Lithuania, and the Netherlands. More precisely, Belgium, France, Lithuania, and the Netherlands do have a cash-accounting scheme, but it is not targeted to enterprises below a certain size, and thus bear no relation with Article 167a, which only applies to micro enterprises⁵⁰. **In 20 out of 22 Member States, the cash accounting regime is**

⁴⁶ Article 63.

⁴⁷ Article 66(b).

⁴⁸ The VAT Committee is an advisory Committee consisting of representatives of the Member States and of the Commissions set up by Article 398 of the VAT Directive.

⁴⁹ Member States wishing to postpone the VAT deductibility for cash accounting taxable persons had to apply for an explicit derogation from Article 167 regulating the right of deduction.

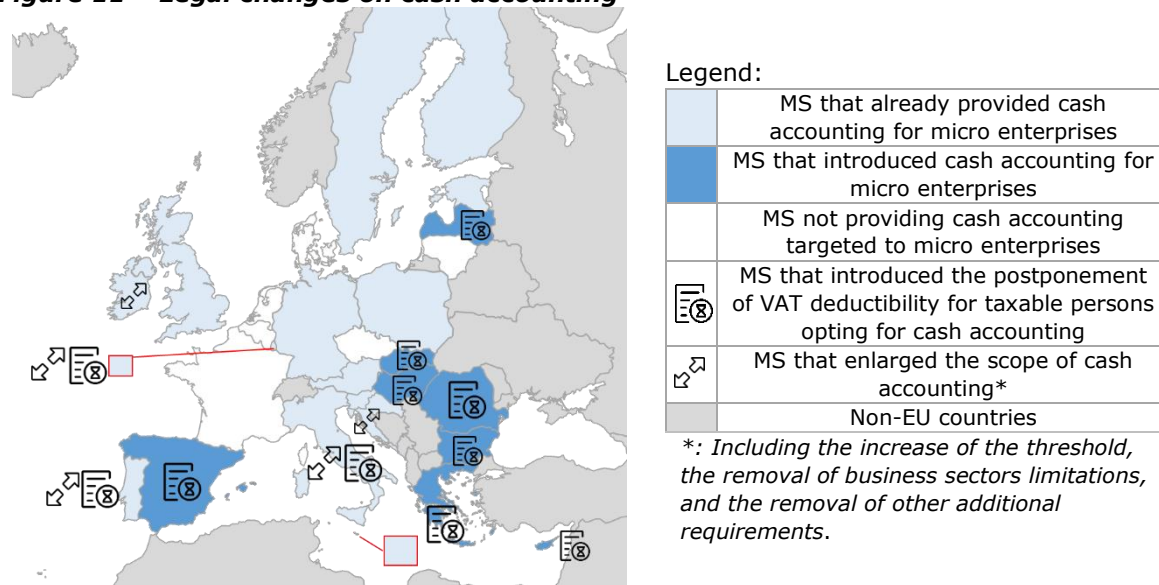
⁵⁰ In Belgium, taxable persons can apply a cash accounting regime for the VAT due for B2C sales, implying that there are no 'cash accounting taxable persons', but only taxable persons that can apply the cash accounting regime to certain transactions. There are no limits in terms of transactions and turnover for the adoption of this regime. In France, most of service providers can opt in for the cash accounting regime, with no turnover limitation, as confirmed in Deloitte (2017), Special scheme for small enterprises under the VAT Directive 2006/112/EC - Options for review, Final report, Volume 1, page 82. Hereinafter, 'Deloitte Report'.

combined with the postponement of the VAT deduction, as allowed by Article 167a, the only exceptions being Germany and Ireland.

Eight Member States have introduced the cash accounting over the last five years, namely Bulgaria, Cyprus, Greece, Spain, Hungary, Latvia, Romania, and Slovakia. In all these Member States, the introduction of the cash accounting was paralleled with the implementation of Article 167a, i.e. with the postponement of deduction. In addition, **the postponement of VAT deduction was also introduced in three Member States that previously had the cash accounting regime in place**, namely Italy, Luxembourg, and Portugal.

Further to the countries that introduced this regime *ex novo*, **the scope of cash accounting was also enlarged as a result of other changes to the national legal frameworks**. Three Member States (Ireland, Italy and Luxembourg) increased the ceiling under which micro enterprises can opt for cash accounting; in one (Portugal), the scheme went from specific (applicable only to certain taxable persons), to open to any taxable person below the turnover threshold. Only in Malta, the introduction of the ceiling caused a reduction of the number of eligible taxable persons. The changes are summarised in Figure 11 below.

Figure 11 – Legal changes on cash accounting



Source: Authors' own elaboration.

Finally, in some Member States, the cash accounting scheme is accompanied by a variation in the deductibility of VAT for the customer of a cash accounting taxable person, an aspect on which the Directive includes no provisions. Most Member States have kept the general rules applicable, so that the deductibility of the VAT paid on purchases from cash accounting taxable person is linked to the date of the transaction. A minority of Member States have opted for granting deductibility of VAT upon payment of the transactions. Prior to the transposition of the SID, five countries required customers to deduct VAT upon payment (Croatia, Italy, Lithuania, Malta and Poland). Currently, **10 Member States require VAT deduction upon payment for the customers of cash accounting taxable persons**.

Summary and attribution of changes. The increase in the availability of the cash accounting scheme for micro enterprises was remarkable, as it is now in use in 22 Member States, that is eight more than prior to the transposition of the Directive. Even in countries where the cash accounting scheme was in place, its scope has increased, e.g. in terms of thresholds. **The new Article 167a was one the factors**

with a positive role in the more widespread introduction of cash accounting, even though not the most important one. Other factors were at play in the same period, and, in particular, the economic and financial crisis, which called for Member States to enact policies that could relieve SMEs from the worsening payment conditions and the liquidity crunch⁵¹.

3.3.2 VAT chargeability

Title VI of the VAT Directive provides the rules for determining the occurrence of the chargeable event and the time when the VAT becomes chargeable, which, as a general rule, happens when the goods or services are supplied. The SID does not alter the general framework for VAT chargeability, but introduces **two changes concerning the rules for the intra-Community supply and acquisition of goods**, with the aim of fighting cross-border VAT frauds⁵²:

- First, **the SID aligned the chargeability of intra-EU supplies and acquisitions of goods**, which is now set upon issuance of the invoice, or on the 15th day of the month following the taxable event, by amending Articles 66, 67, and 69.
- Second, it introduced more stringent rules for the **intra-EU continuous supplies of goods** (in Article 64), which were not the object of a specific provision before. Under the new regime, the intra-EU continuous supplies of goods become chargeable at the end of each calendar month.

Analysis of transposition. For VAT chargeability, the analysis of transposition was based on **three indicators**: (i) whether intra-EU continuous supplies of goods are chargeable at the end of each month; (ii) whether intra-EU supplies of goods are chargeable upon issuance of the invoice, or on the 15th of the following month; and (iii) whether intra-EU acquisitions of goods are chargeable upon issuance of the invoice, or on the 15th of the following month. **Such an analysis shows no substantive discrepancies between EU prescriptions and the national legal frameworks.**

Changes in national legal frameworks. The reconstruction of the legal framework did not prove an easy task because of the relationship between the occurrence of the chargeable event, and the chargeability of VAT. While the former is regulated by specific provisions *de facto* in all national frameworks, the latter may not be, as a general reference can be made to the timing at which the VAT is to be paid to the public budget. To make things more complex, the payment date is often set on the 15th or 16th of the following month (or quarter, depending on the frequency of the VAT declarations), thus 'naturally' overlapping with the date for chargeability of intra-EU supplies now prescribed by the SID.

⁵¹ Tax authorities were asked to rate the importance of four drivers in the decision to introduce or expand the cash accounting scheme. The economic and financial crisis and payment delays for SMEs were identified as a largely important driver by the majority of TAs surveyed; the average answer is between large and moderate importance. The possibility to introduce the postponement of VAT deduction, i.e. Article 167a, was identified as a moderate important driver by the majority of TA; the average answer is between minor and moderate importance. A fourth driver was tested, i.e. the possibility to postpone VAT deduction for the customers; its average importance is between minor and moderate. The analysis was replicated considering only Member States which introduced the scheme and excluding those which have expanded it, with no significant differences.

⁵² These changes follow, and, to some extent mimic, those introduced by Directive 2008/117/EC for the chargeability of the intra-Community supply of services, providing that continuous supplies of services subject to reverse charge become chargeable on expiry of each calendar year, thus making the optional regime provided for by Article 64(2) mandatory. Furthermore, it excludes intra-Community supplies of services subject to reverse charge from the transactions for which Member States may introduce specific derogations ex Article 66. Cf. Council Directive 2008/117/EC amending Directive 2006/112/EC on the common system of value added tax to combat tax evasion connected with intra-Community transactions.

With respect to the chargeability of intra-EU supplies and acquisition of goods, the situation prior to the SID was already rather homogeneous. A majority of Member States already had foreseen that the VAT chargeability date was set each month / on the 15th of the month following the chargeable event, or upon issuance of the invoice, while a minority (four for supply, and six for acquisition) considered the dispatch or arrival of the good or the end of the taxation period as the moment of chargeability. Currently, ***all Member States have converged towards the common date of chargeability provided for by Articles 67 and 69.***

With respect to the chargeability of intra-EU continuous supplies of goods, in the majority of Member States (15), the practice was similar to the current SID provisions, so that they became chargeable 'each calendar month / at the end of the month in which the chargeable event occurred / on the 15th of the month following the chargeable event'. In eight Member States, the chargeability of VAT coincided with the dispatch or arrival of the goods, so that there was no specific provision at all for continuous supplies; finally, in three Member States, the VAT chargeability was linked to the receipt of the price (or at the end of the year if the price was not paid), while, in one Member State, it took place at the end of the tax reporting period. ***The situation has now been harmonised, as in all Member States continuous intra-EU supplies of goods become chargeable each calendar month.***

Summary and attribution of changes. It is difficult to precisely assess the impact of the new norms on the national legal framework. The reconstruction of the legal frameworks proved complex, as not all EU countries foresee specific rules and, in some cases, the previous rules already corresponded to the Directive provisions. Most importantly, these provisions have not yet been 'tested' in practice, because tax audits have not yet reached, in most of Member States, the period in which they were already in force. For this reason, ***neither VAT practitioners nor economic operators considered that a significant change in the area of VAT chargeability has occurred after the approval of the Directive.***

3.4 Legal mapping: Archiving

The VAT Directive includes a number of provisions on the archiving of invoices, which, with the exception of Article 247(2) described above⁵³, were not amended by the SID⁵⁴. Still, considering that different archiving rules and e-invoicing storage requirements could represent a barrier for the uptake of e-invoice and an obstacle for cross-border operators, their current status of implementation has been reviewed and is summarised in the following sections. Obviously, since these provisions are unamended, no transposition check was carried out.

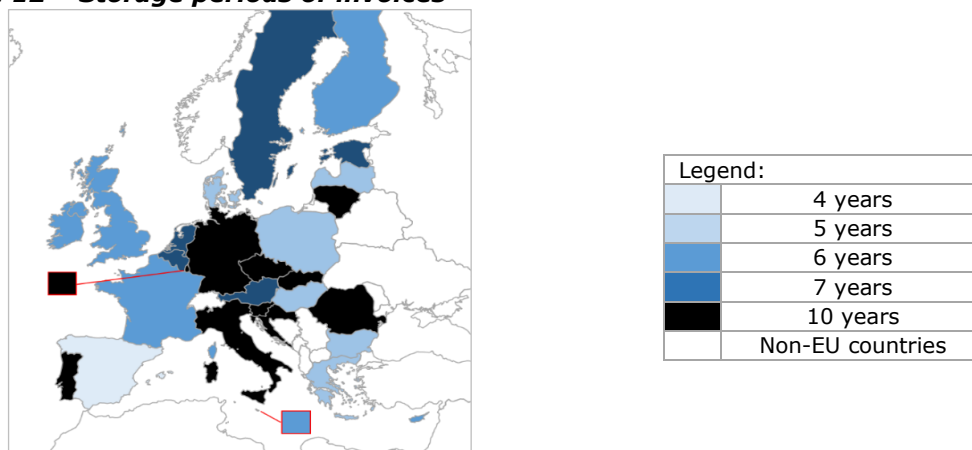
Storage period. Article 247(1) allows Member States to determine the period for which taxable persons must store their invoices, both issued and received. As a consequence, ***national storage periods are not harmonised across the EU***, and range from 4 to 10 years, with the majority of countries opting for five to seven years (see Figure 12 below)⁵⁵. Very limited changes occurred from 2013 onwards, as only Cyprus reduced the storage period from seven to six years.

⁵³ Cf. Section 3.1.4.

⁵⁴ Despite the fact that some changes, such as the establishment of a common 6-year storage period for invoices, were included in the Proposal.

⁵⁵ Excluding exceptions, such as invoices for transactions concerning immovable property, which must usually be kept for a longer period.

Figure 12 – Storage periods of invoices

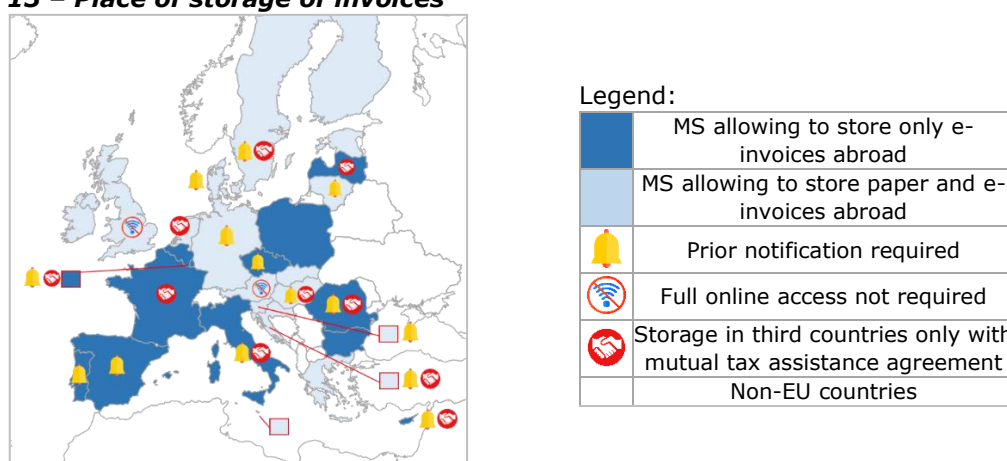


Source: Authors' own elaboration.

Place of storage. Article 245 of the VAT Directive establishes the freedom to store invoices abroad, and gives Member States the options to: (i) require a prior notification, (ii) prohibit storage of invoices abroad if not done by electronic means guaranteeing full online access to the data concerned, and (iii) prohibit or limit storage in a third country with which no legal instrument exists relating to mutual assistance or to the right to access by electronic means.

At present, all Member States grant the possibility of storing invoices abroad in electronic format, and 16 also for paper invoices⁵⁶. The only country where a prohibition to store invoices abroad was in force prior to the SID – Latvia – now allows e-invoices to be kept outside the country. **The near totality of Member States (26) require having full online access to e-invoices stored abroad**, including seven countries that specify that such access shall be granted upon request. **Half of Member States require a prior notification for storing invoices abroad**, although some of them only in specific cases. Finally, 10 Member States explicitly prohibit storage in countries that are not bound by a mutual tax assistance agreement⁵⁷. Figure 13 below summarises the current EU situation.

Figure 13 – Place of storage of invoices



Source: Authors' own elaboration.

⁵⁶ In a few cases, limitations apply. For instance, Denmark allows storing paper invoices abroad, but only in Scandinavian countries or in those countries where activities are being conducted, and only temporarily. Similarly, Finland and Sweden allow to store invoices abroad for accounting needs, but only temporarily.

⁵⁷ Including Sweden, where storage of e-invoices is allowed only in countries with a legal instrument governing mutual assistance.

Storage form. Based on Article 247(2), Member States may require that invoices be stored in the original form in which they were sent (e.g. e-invoices would have to be stored only in electronic format). Such a restriction is currently imposed only by Bulgaria, Cyprus and Lithuania⁵⁸. Of the remaining 25 countries, **18 Member States allow to convert invoices from paper to electronic format and vice versa**, while **seven Member States solely permit to convert paper invoices into electronic ones**. In case of conversion from paper to electronic – a process referred to as digitisation or digitalisation – all 18 Member States also allow to discard the paper version, possibly after a certain period.

In addition to the overarching rule of preserving I&A during the conversion process, **ten Member States envisage specific conditions regulating the digitisation procedure**⁵⁹. Such rules are usually not included in the VAT law but in a separate piece of legislation regulating the storage of electronic documents. Possibly due to the relative newness and variety of scanning technologies, ranging from a mere photograph to tamper-proof dedicated software, rules significantly differ from one country to the other. Despite the differences, **four categories of digitisation rules** appeared to often recur, namely (i) to put an electronic mark, stamp or signature onto the digitalised copy, usually to prevent any future changes (required in all countries except for Ireland and Sweden); (ii) to keep the paper original together with the electronic copy for a certain time (such as in Germany, Portugal, and Sweden); (iii) to keep a document where the digitisation procedures are described (as in Germany, Denmark, Ireland, Italy, Latvia, and Portugal); or (iv) to use a certified scanning software, as in Spain and Portugal⁶⁰.

Overall, **the rules on the conversion of invoice form remain not fully harmonised across the EU**, although, compared to the situation before the Directive, some improvements are noticeable. As the SID did not change this aspect, changes have occurred due to national interventions, most likely linked to the technological evolution of digitisation and e-storage systems. In particular, some Member States have withdrawn burdensome requirements, such as Italy removing the requirements for the storage of paper documents in original form⁶¹, and France, allowing scanned PDF copies

⁵⁸ In this respect, Italy, Malta, and Slovakia emerged as peculiar cases, based on discussion with the local tax authorities. In Italy – while the conversion from paper into electronic form is allowed and regulated in details – the opposite conversion (from electronic into paper form) is not explicitly envisaged. However, a taxpayer is allowed to reject the electronic form of an inbound invoice by printing it and archiving it in paper. As a result, a taxpayer is *de facto* able to transform an e-invoice into a paper one. In Malta, while Article 48(1)(2) of the Eleventh Schedule of the VAT Act requires invoices be stored in the original form, the tax authority accepts copies, making it *de facto* unnecessary to store the original. In Slovakia, the VAT legislation was amended on 1.1.2017 requiring that invoices be stored in their original form, only to delete the amendment on 2.1.2017 (i.e. one day later), thus allowing invoices to be stored in a different form from the original.

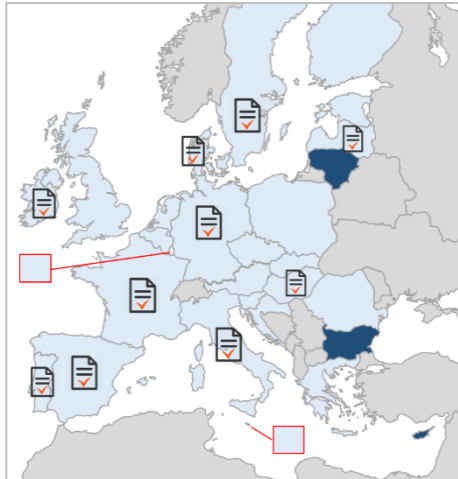
⁵⁹ Germany, Denmark, Spain, France, Hungary, Ireland, Italy, Latvia, Portugal, and Sweden.

⁶⁰ As far as Germany is concerned, reference is made to the *Grundsätze zur ordnungsmäßigen Führung und Aufbewahrung von Büchern, Aufzeichnungen und Unterlagen in elektronischer Form sowie zum Datenzugriff (GoBD)*, namely the Principles for the Proper Maintenance and Retention of Books, Records and Records in Electronic Form and for Data Access, published by the Ministry of Finance on 14 November 2014 and valid from 1 January 2015. For Denmark, see the *Bookkeeping Act*, which was last updated in 2015. For France, specific regulation on the digitisation of invoices is included in the *Arrêté du 22 mars 2017 fixant les modalités de numérisation des factures papier en application de l'article L. 102 B du livre des procédures fiscales*. As per Hungary, the storage of electronic documents in general is regulated in *Government decree 451/2016 (XII. 19.)*. For Ireland, refer to *Part 38-03-14 of the Tax and Duty Manual*. For Italy, see the *Decree of the President of the Council of Ministers of 3 December 2013*. For Portugal, refer to *Ordinance 363 of 23 June 2010*. For Spain, the rules for the software certification are provided in *Order EHA/962 of 10 April 2007*, with particular reference to Article 7 therein, while the rules for the creation of the conservation system and the drafting of its description in the conservation manual are included in the *Decree of the President of the Council of Ministers of 3 December 2013*. For Sweden, see the *Accounting Act*, and especially the revisions introduced by *Law 2010: 1514*.

⁶¹ Article 22(6) of the Legislative Decree no. 82 of 7 March 2005 (also known simply as Digital Administration Code) stated that a paper document had to be stored in its original form, or could be converted in electronic format, to be electronically signed by an authorized notary. The article was recently repealed by the Legislative Decree no. 179 of 26 August 2016.

of paper invoices to be used for tax deduction purposes, although a number of additional rules still apply (e.g. a certified e-signature, a time stamp)⁶². Germany allows the disposal of the original document (including invoices)⁶³, but leaves unclear the extent to which the original should be produced in courts if so required⁶⁴. Figure 14 below illustrates the current situation in the EU regarding the form and conversion of stored invoices.

Figure 14 – Invoice storage form



Legend:

	MS requiring invoices be stored in original form
	MS allowing to convert invoices(*)
	MS imposing specific conditions for the scanning and disposal of paper invoices
	Non-EU countries

Note:* Certain Member States only allow the conversion from one form to another (e.g. only from paper to electronic form, and not vice versa).

Source: Authors' own elaboration.

Source: Authors' own elaboration.

⁶² French authorities used to not accept scanned PDF copies to grant VAT deductions. This is now explicitly allowed and regulated by Article L102B of the Tax Procedures Code and by the *Arreté* of 22 March 2017, *supra* note 63.

⁶³ BMF, *Umsatzsteuer-Anwendungserlass – konsolidierte Fassung* (4. October 2018); section 22.1 (2).

⁶⁴ See Section 4.4 on the issues and barriers of archiving rules.

4 RELEVANCE

This Section presents the assessment of the Relevance of the Directive according to the following structure. First, the **ongoing importance of the Directive's objectives** is assessed based on the qualitative feedback provided by key stakeholders, supported by a quantitative description of the invoicing process and the needs of Member States and stakeholders (in Section 4.1). Secondly, a more detailed assessment is carried out of **the extent to which the issues targeted by the Directive have been addressed** and the role played by the SID provisions, the **stakeholders' appreciation of the Directive provisions** and the **ongoing persistence of the issues at stake**. Such a detailed assessment is replicated over five thematic areas, namely: (i) e-invoicing requirements (in Section 4.2); (ii) requirements on invoicing issuance and content (in Section 4.3); (iii) archiving rules (in Section 4.4); (iv) SME promotion by means of cash accounting (in Section 4.5); and (v) tax control (in Section 4.6). Finally, it is also verified to what extent the modifications in the regulatory, market, and technological conditions may have changed the stakeholders' needs, and thus affected the relevance of the Directive (in Section 4.7).

4.1 Relevance of Directive objectives

As described in the intervention logic⁶⁵, the Directive has **four specific objectives**:

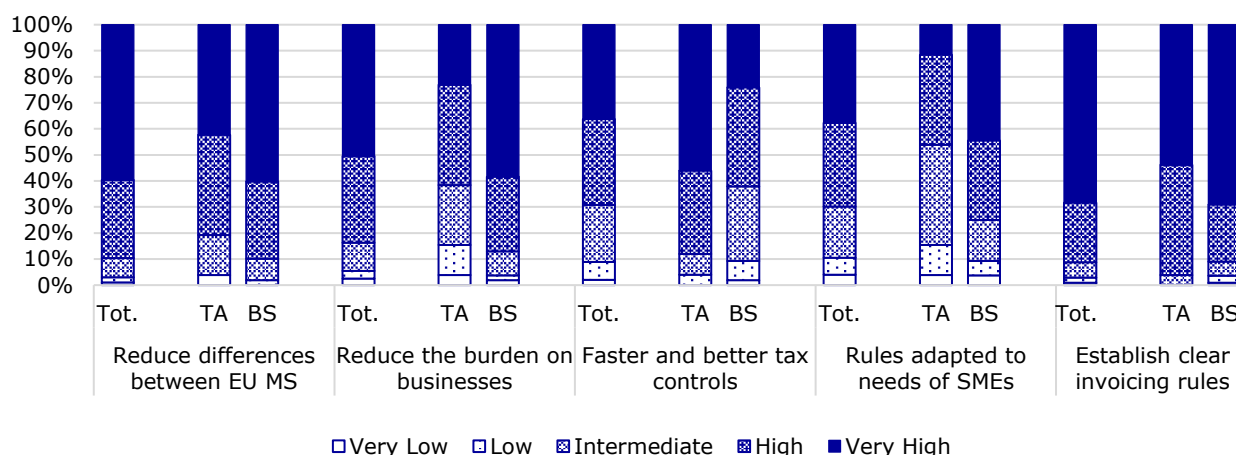
- 1) Simplifying (e-)invoicing rules, thus reducing the administrative burdens on businesses;
- 2) Harmonising the invoicing regulatory framework, thus improving the functioning of the Internal Market;
- 3) Supporting SME, especially by promoting the uptake of cash accounting;
- 4) Improving tax control activities, and, thus, supporting the fight against VAT fraud.

Stakeholders were asked, during the targeted and public consultation, to assess the importance of these goals, together with a fifth possible objective, that is legal certainty. **All Directive objectives are being seen as important or highly important by a plurality of the stakeholders** (no less than 69%), but their relative importance varies between tax authorities and business stakeholders.

The highest prominence is given by stakeholders to the establishment of clear invoicing rules (legal certainty), and the reduction of differences in invoicing rules across EU countries (harmonisation). The responses by tax authorities and business stakeholders about these two goals are largely homogeneous. The remaining three objectives show a greater differentiation. While the simplification of invoicing rules, i.e. reduction of burdens on businesses, and the adoption of rules promoting SMEs are significantly more prominent among business stakeholders than tax authorities, the reduction of VAT frauds as an objective is of key importance to tax authorities. Figure 15 provides an overview of the results.

⁶⁵ Cf. Section 1.2 above.

Figure 15 – Importance of Directive objectives to all stakeholders, tax authorities, and business stakeholders



Note: TA: Tax Authorities; BS: Business Stakeholders.
Source: Targeted & public consultation.

4.1.1 Simplification and Harmonization

The overall high importance given to all Directive objectives by business stakeholders is largely motivated by the sheer importance and pervasiveness of the invoicing activities. As shown in Table 4 below, the estimated average volume of invoices issued per year grows exponentially with the increase of the business size, going from about 340 for micro businesses, to more than 140,000 for large firms⁶⁶. The same applies to invoices received, with micro businesses receiving some 390, while large companies about 100,000.

Table 4 – Volume of invoices issued and received by EU firms (annual average, 2017)

Business size	Issued	Received
Micro enterprises	343	391
Small enterprises	1,783	1,388
Medium enterprises	8,699	5,589
Large enterprises	142,726	102,351

Source: Authors' elaboration on business survey.

To estimate the overall volume of invoices exchanged at EU level, the average number of invoices issued/received was multiplied by the number of firms by size class⁶⁷. As result, and assuming a constant business population, **the total volume of invoices exchanged in the EU in 2017 was estimated at 34.9 billion**, of which about 18.4 billion issued and 16.4 billion received⁶⁸.

⁶⁶ The average volume of invoices issued/received per company in 2017 has been estimated based on the data from the business survey.

⁶⁷ Eurostat Structural Business Statistics.

⁶⁸ The discrepancy between invoices issued and received is mostly due to Business-to-Customer (B2C) invoices (which are not accounted by those received by other companies) and, to a much more limited extent, to extra-EU trade flows.

Box 5 – Validation of the estimates on the volume of invoices

Estimates on the amount of invoices issued have been validated based on the comparison with the limited available sources, and their reliability is confirmed. The overall amount at EU level is largely consistent with the estimates provided by Billentis⁶⁹, which set the European invoice volume at some 36 billion in 2016. The comparison with the available national official figures, provided by tax authorities⁷⁰, or estimates secondary sources, also supports the above estimates, with discrepancies falling within +/- 15% of the estimated values, as summarized in Table 5 below.

Table 5 – Comparison of volumes of invoices issued and received, by Member State (2017, in billion)

Member State	Own estimate	Official figures / other estimate	Source
Greece	0.39	0.34	Tax authority
Lithuania	0.15	0.13	Tax authority
Poland	1.21	1.43	Tax authority
Belgium	0.79	0.93 (B2B)	ASA survey ⁷¹
Netherlands*	1.39	1.10 (2012)	Panteia, Sustainable SCM ⁷²

Note:* for the Netherlands, figures refer to invoice exchanged.

Source: Authors' elaboration on targeted consultation and desk research.

The harmonisation of national requirements is obviously relevant for the invoices issued for intra-EU transactions, or, in short, cross-border invoices. There is no official statistics on the number of cross-border invoices, either in absolute terms or as a share of total VAT invoices⁷³. Based on the results of the business survey, **B2B intra-EU invoices represent about 9% of the total number of invoices issued**⁷⁴. Expectedly, **the share increases with the firm size**, with cross-border invoices representing about 3.5% of the total for micro companies, and about 15% for large enterprises. Concerning the sectoral distribution, the industries more apt to international trade obviously feature a higher share (such as manufacturing, ICT, and transports), while more local services (retail, accommodation and food, retail estate) a lower one. Results are summarised in Table 6.

With an estimated share of 9%, **the number of intra-EU invoices issued amount to about 1.9 billion**, which is more than the invoices issued in a mid-sized such as the Netherlands. According to several VAT practitioners and large multinationals, a large

⁶⁹ Billentis (2016), E-Invoicing / E-Billing – Digitisation and Automation.

⁷⁰ In some Member States, data provided by the TA were not comparable. In Portugal, as stressed by the TA that figures refer to the number of invoices reported to the tax administration through the *e-fatura* system. Thus, they should not be regarded as fully accurate estimates of the actual amount of invoices annually exchanged. Similar limitations apply to data provided by TA in Czech Republic, Slovakia and Spain, where the data concerned only certain type of invoices or transactions (e.g. above the minimum value to which reporting obligations apply).

⁷¹ Agence pour la Simplification Administrative (ASA) (2016), Rapport Facturation électronique: Calcul des économies en charges administratives réalisées grâce à l'utilisation de la facturation électronique en 2015. Hereinafter, 'ASA Report 2016', also valid for previous years, e.g. 'ASA Report 2015' & 'ASA Report 2014'.

⁷² Panteia (2012), The Sustainable SCM: an innovative two edged sword.

⁷³ Among the Member States consulted, only in Poland the tax authority could provide an estimate, so that the number of invoices for intra-EU supply of goods, exports of goods and provision of services outside the territory of Poland is estimated to be in-between 4% and 6% of the total. Based on the extrapolated business survey results, the estimated number of cross-border invoices is not dissimilar, amounting to 7.8%. Please note that the two data are not fully comparable, as (i) business survey data cover all B2B intra-EU transactions, i.e. between companies established in two Member States, regardless of the place of the transaction; and (ii) business survey data do not include extra-EU transactions. The first difference should increase the survey data values compared with the Polish statistics, while the other goes in the opposite direction, so that the overall effect remains unclear.

⁷⁴ Business survey data show the number of invoices issued by each company, and the share of intra-EU invoices issued. The results were extrapolated at EU level based on the (i) size and sector firm distribution in the eight Member States concerned; (ii) the internet access rate; and (iii) the estimated number of invoices per size class. Financial, educational and health services were excluded from the extrapolation.

number of those invoices are for intra-group transactions, up to possibly one third of the total.

Table 6 – Share of invoices for intra-EU transactions (% of total invoices)

Business size		Industry			
Micro	3.6%	Manufacturing	14.1%	ICT	12.9%
Small	9.1%	Construction	7.3%	Real Estate	2.9%
Medium	12.0%	Wholesale	5.7%	Professional /	8.6%
Large	15.2%	Transports/Storage	11.4%	Scientific activities	
Total	9.2%	Accommodation/Food	5.4	Other	10.2%

Source: Authors' analysis based on business survey data.

4.1.2 SME Promotion

The SID introduced a number of changes that are also beneficial for SMEs⁷⁵ (as discussed more in details in Sections 4.2 and 4.3). More specially, the **Directive aimed at fostering the adoption of one regime specifically designed for micro companies – i.e. the cash accounting scheme**. While in four countries the regime is open to larger companies⁷⁶, in most Member States, the cash accounting regime is specifically targeted at micro companies, i.e. those below EUR 2,000,000 of turnover. The analysis focuses on the latter type of cash accounting, currently available in 22 Member States⁷⁷, since the newly introduced Article 167a only concerns micro companies.

The cash accounting regime allows companies to account for their output VAT upon receiving the associated payment, and not upon issuance of the invoice. Thus, it protects companies from the liquidity risk that the VAT becomes due before a payment is received. **This risk affects more heavily micro companies which, given their lower contracting power, face a higher likelihood of incurring in late payments problems**⁷⁸. Not only the risk is higher, but also the detriment is. Late payments can, indeed, pose a more significant challenge to SMEs, which are less likely to have the financial capabilities to compensate for delays in receivables.

Late payments create risks for SMEs in at least 70% of the countries applying cash accounting for micro enterprises⁷⁹. For B2G transactions, this is the case in 15 out of 22 countries; for B2B this is the case in 11 Member States⁸⁰. **The problem appears particularly severe in Southern Europe**, as enterprises receive payments after VAT is due for more than 40% of their B2G transactions in Cyprus, Greece, Italy, Portugal, and Spain⁸¹. For B2B, the share of transactions is generally lower, and higher than 40% only in Cyprus.

⁷⁵ (i) 0-9 micro; (ii) 10-49 small; (iii) 50-249 medium; and (iv) 250 large, in line with the EU definition, cf. Commission Recommendation concerning the definition of micro, small and medium-sized enterprises (C(2003)1422).

⁷⁶ In Belgium, France, Lithuania, and the Netherlands.

⁷⁷ Cf. Section 3.3.1 above.

⁷⁸ Payment times and delays within the EU are governed by the Late Payments Directive. Cf. Directive 2011/7/EU of the European Parliament and of the Council on combating late payment in commercial transactions.

⁷⁹ This results from comparing the average payment duration and the number of days, between the end of the VAT reporting period and the deadline for the VAT to be paid. When the former period is longer than the latter, VAT becomes due before a share of the payments is received.

⁸⁰ Full data are reported in Table 28 below (Section 4.5).

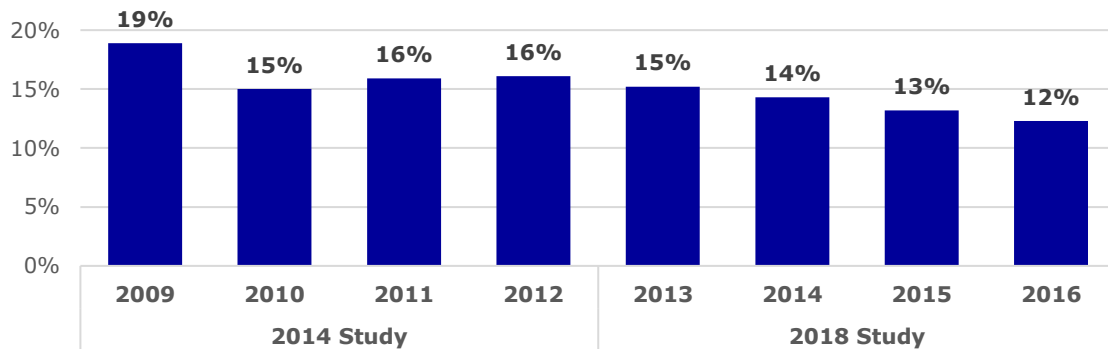
⁸¹ The ratio is calculated by assuming that transactions are evenly spread across the time period.

4.1.3 Improving tax control activities

Finally, one of the objectives of the SID was to help tackling VAT fraud and evasion, both domestic and cross-border, which may rely upon fake or irregular invoices for underreporting, claims of excessive deductions, and the so-called carousel or Missing Trader Intra Community (MTIC) schemes. The latter fraud was also targeted by specific SID measures, and namely the new rules on VAT chargeability and the uniform time limit for intra-EU transactions. The current relevance of control and anti-fraud policies is examined by looking at the total scale of VAT non-compliance and the value of the irregularities and frauds linked to invoicing.

To measure VAT non-compliance, the **VAT Gap** is commonly used. It is an aggregate measure of non-compliance, defined as the difference between the expected and actual VAT revenues. It could be considered as a gross measure, as it does not include VAT recovered through audits and verification actions. The VAT Gap represents not only fraud and evasion, but also tax avoidance, as well as insolvencies, bankruptcies and administrative errors, which are beyond the scope of the SID. According to the most recent study published by the Commission⁸², **the VAT Gap in EU fell in 2016 below EUR 150 billion; in relative terms, the VAT Gap share of the VAT Total Tax Liability (VTTL) dropped to 12%**. This is the lowest share observed in the time horizon covered by the gap studies. Notably, at its peak (in 2009), the share of the VAT Gap over VTTL was six percentage points (p.p.) higher⁸³. Despite such a positive trend in VAT compliance, **losses in VAT revenue still have a strong and negative impact on the public budgets**, as the revenue loss in VAT was nearly as large as the average yearly EU budget. **The significance of the VAT Gap largely differs significantly across countries**. In 2016, the share of the VAT Gap over VTTL ranged from nearly zero up to almost 36%.

Figure 16 – Evolution of the VAT Gap in the EU (% of the VTTL)



Note: TA: Tax Authorities; BS Business Stakeholders

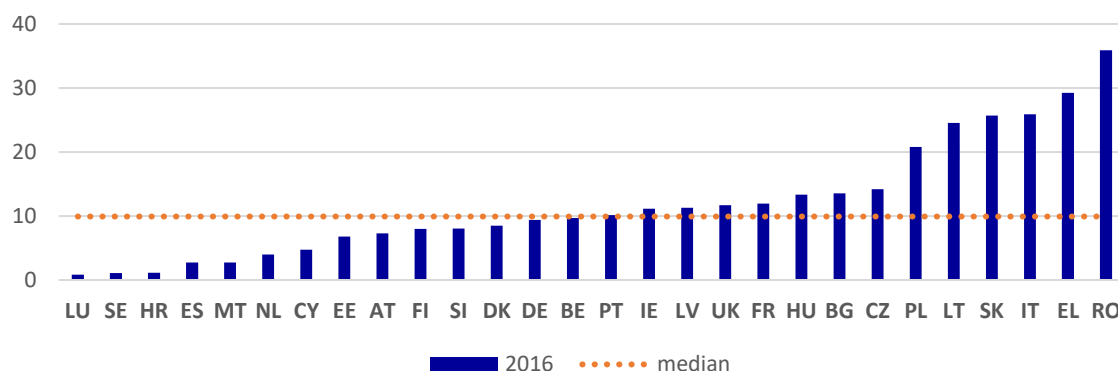
Source: 2014 and 2018 VAT Gap Studies⁸⁴.

⁸² CASE – Center for Social and Economic Research (2018), Report for the European Commission, Study and Reports on the VAT Gap in the EU-28 MS, Final Report. Hereinafter, 'VAT Gap Study 2018'.

⁸³ CASE – Center for Social and Economic Research (2014), Report for the European Commission, 2012 Update Report to the Study to quantify and analyse the VAT Gap in EU-27 MS. Hereinafter, 'VAT Gap Study 2014'.

⁸⁴ The series has been replicated in the 2015, 2016, and 2017 studies, but data do not differ significantly.

Figure 17 – VAT Gap across EU Member States (% of the VTTL)



Source: 2018 VAT Gap Study.

Information on the number and value of irregularities detected is largely unavailable and, consistently, data provided by the tax authorities were limited, and provided by only six Member States. Most importantly, no case specific data on the number and value of irregularities related to incorrect or fake invoices could be provided.

Some estimates exist on MTIC frauds from secondary sources and from the data provided by the tax authorities, but the scale of this fraud remains uncertain. These frauds exploit the specific VAT mechanisms for the intra-EU acquisition of goods and seemingly represent one of the core components of the VAT Gap. The existence of the problem and the need for intervention is acknowledged in the literature⁸⁵. The Commission and Europol suggest that MTIC frauds could amount to EUR 40-60 billion in 2016⁸⁶. According to the same source, the scale of the fraud could explain up to 80% of VAT non-compliance in the EU. In a recent impact assessment, the indicative value of MTIC was put at EUR 45-53 billion, or 24% of the VAT Gap⁸⁷. Accurate estimates for MTIC are unavailable for the vast majority of Member States.⁸⁸

Considering the data provided by the six Member States for which they are available, the number of MTIC frauds go from few cases per year, to less than 1% of the number of detected irregularities. In terms of value, **the share of VAT irregularities due to MTIC varies substantially from country to country**, and, in the same country, from year to year. Only in one country it represents about 50% of the value of the VAT irregularities detected. In general, based on the available data, **the MTIC-type frauds are of a larger scale compared to average VAT fraud.**

⁸⁵ See e.g. Fedeli S., Forte F. (2011), EU VAT frauds, European Journal of Law and Economics.

⁸⁶ Proposal for a Council Regulation amending Regulation (EU) No 904/2010 as regards measures to strengthen administrative cooperation in the field of value added tax, COM(2017) 706 final.

⁸⁷ Commission Staff Working Document, Impact Assessment Accompanying the document Proposal for a Council Directive amending Directive 2006/112/EC as regards harmonising and simplifying certain rules in the value added tax system and introducing the definitive system for the taxation of trade between Member States, SWD(2017)325, at p.22.

⁸⁸ The British Tax Authority is one of the few that conduct studies on the scale of this fraud, and it estimates that the MTIC amounted to 0.5-1.0% of the VTTL in 2015-16, and up to 0.5% in 2016-17. The Belgian Court of Auditors assessed that MTIC amounted to EUR 28 million in 2011. The estimate of MTIC, in 2013, in Poland amounts to 11% of the VAT Gap, which in monetary terms is equal to more than EUR 1 billion. Cf. i.a. HMRC (2018), Measuring tax gaps 2018 edition; Cour des Comptes (Belgique), « Fraude intracommunautaire à la TVA. Audit de suivi réalisé en collaboration avec les cours des comptes des Pays Bas et d'Allemagne », submitted to the Belgian House of representatives in September 2012; Poniatowski, G. & Neneman, J. & Michalik, T. (2016), VAT non-compliance in Poland under scrutiny (Problem niesciagalnosci VAT w Polsce pod lupa), mBank - CASE Seminar Proceedings 0142, CASE-Center for Social and Economic Research.

4.2 E-invoicing rules

4.2.1 Changes in regulatory complexity and fragmentation and Directive's role

The review of the national legal frameworks on e-invoicing clearly points out that both the fragmentation and the complexity have largely decreased across the EU as a result of the transposition of the Directive. A much more coherent framework has emerged, with the vast majority of Member States adopting a rather 'liberal' approach and removing national specific e-invoicing requirements.

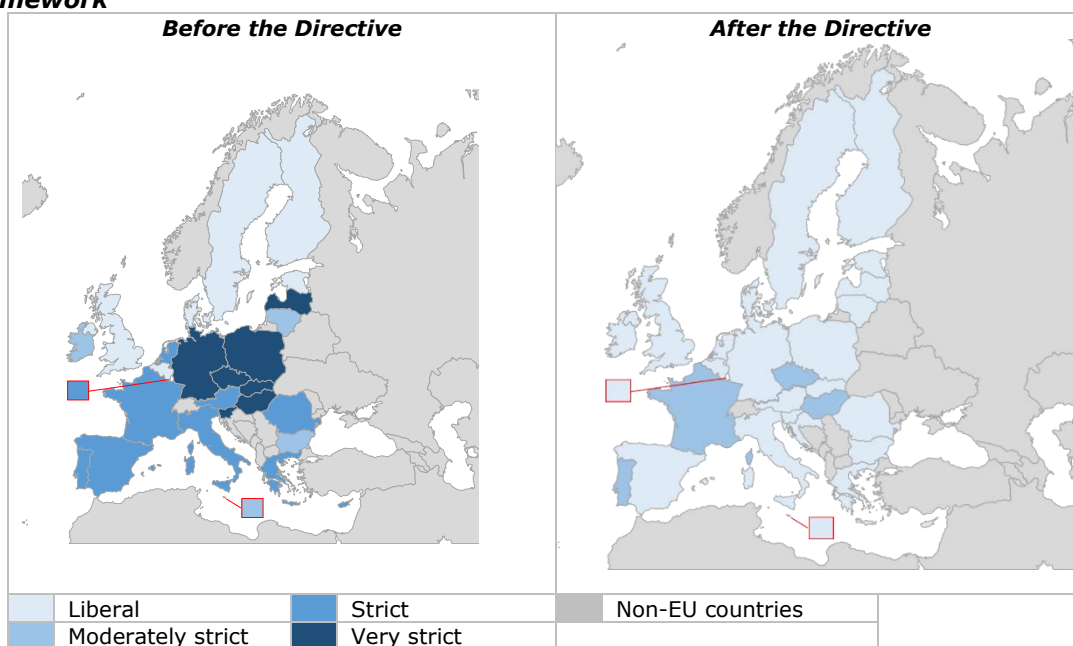
Such an evolution is vividly illustrated by the before and after comparison of EU maps, where Member States are categorised by the **degree of strictness of the national e-invoicing requirements**. More specifically, taking stock of a similar exercise carried out in 2010 by the *Politecnico di Milano*⁸⁹, the national e-invoicing requirements of all EU countries were categorized into four groups, i.e. (i) 'liberal', (ii) 'moderately strict', (iii) 'strict', and (iv) 'very strict'. The categorisation was based on two main criteria: (i) the openness towards the methods accepted to prove the e-invoice I&A, and (ii) the existence of specific e-invoicing requirements, such as the explicit acceptance by the recipient, the prior notification to the tax authority, or specific requirements on EDI. Before the SID, 17 Member States were categorised as 'strict' or 'very strict'⁹⁰. The situation changed significantly after the transposition of the Directive, with a majority of EU countries implementing the freedom of evidence principle: **24 Member States can now be labelled as 'liberal' and only four countries remain as 'moderately strict'**, as their legislation is somewhat less open in terms of the I&A methods accepted or imposes some specific e-invoicing requirements. The result of this exercise is graphically illustrated by Figure 18⁹¹.

⁸⁹ Politecnico di Milano School of Management (2010), *La Fatturazione Elettronica in Italia: Reportage dal Campo, Rapporto 2010 Osservatorio Fatturazione Elettronica e Dematerializzazione*.

⁹⁰ For instance, with reference to the situation prior to transposition of the Directive, the following situation has emerged: (i) seven Member States that prescribed the exclusive use of QES or EDI to prove the e-invoice I&A were classified as 'very strict'; (ii) ten Member States characterised by a slightly more open approach towards the methods to prove I&A (i.e. accepting AES or 'other means' subject to prior approval by the tax authority) and typically imposing some specific requirements on e-invoicing were considered as 'strict'; (iii) four Member States accepting AES and 'other means', with or without prior notification to / approval by the tax authority, and not imposing any specific requirement, were assessed as 'moderately strict'; and (iv) finally, six Member States (mostly in Northern Europe), which accepted all methods as long as the invoice remained correct and unaltered and did not impose any specific requirement, were assessed as 'liberal'. The assessment of the degree of strictness of Croatian e-invoicing rules prior to the transposition of the Directive has not been carried out as it was not an EU member yet.

⁹¹ The information backing the country classification is provided in Annex C.

Figure 18 – Member States convergence towards a liberal and harmonized e-invoicing framework



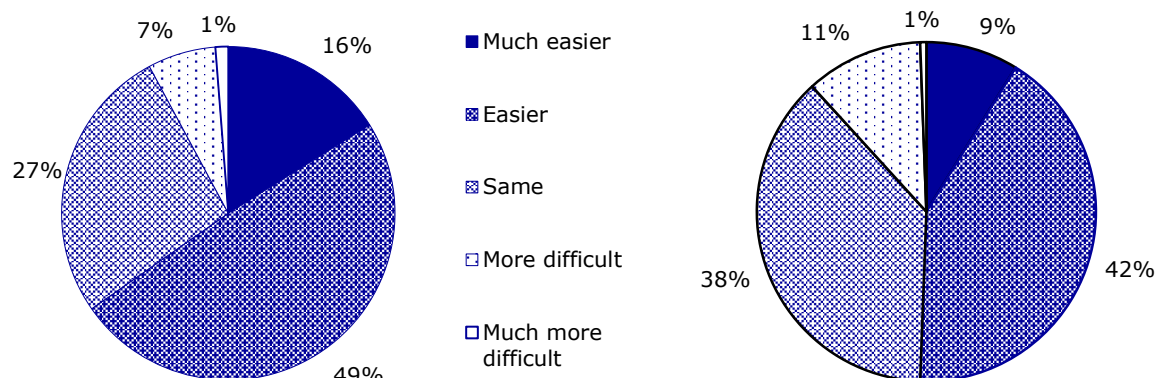
Source: Authors' own elaboration.

The qualitative evidence from different stakeholders corroborates the above findings. The legal changes introduced by the transposition of the SID reportedly improved the e-invoicing regulatory framework significantly, especially for domestic transactions. According to a majority of stakeholders, the evolution in the past five years has been towards easier e-invoicing requirements. While a larger share of stakeholders assesses rules to have become easier when it comes to domestic transactions, there is still a majority saying so also for cross-border operations, even though almost 40% of respondents say that rules have stayed the same in this area. For both domestic and cross-border transactions, less than 15% of stakeholders think that rules have become more difficult.

Concretely, the **positive changes** most often cited by stakeholders include: (i) **the equal treatment of paper and e-invoices and the consequent removal of national e-invoicing specific requirements** (e.g. such as the use of a given e-signature in Germany or the obligation to sign and stamp invoices in Romania); and (ii) **the acceptance of invoices in PDF format** (in some cases, in connection with the introduction of a clear-cut e-invoice definition), **which mainstreamed an easier e-invoicing solution, especially for micro firms**⁹². Stakeholders considering that rules have remained the same or worsened often mention the BCAT option as the main reason for their negative judgment. In particular, the lack of a clear EU definition of this concept is criticised. Other reasons for stakeholders seeing (national) e-invoicing rules as more difficult are actually not attributable to the SID, as reference is made to domestic requirements, as, for example, the difficult or unclear requirements for B2G transactions in Italy and Germany. Evidence of the simplification of the e-invoicing regulatory framework after the transposition of the Directive in the fieldwork Member States is provided in the Box 6 overleaf.

⁹² Cf. Section 5.1below.

Figure 19 – Evolution of e-invoicing rules for domestic (left) and cross-border (right) transactions



Source: Targeted and public consultation.

Box 6 – Evidence of e-invoicing simplification following the transposition of the SID from the fieldwork Member States

In the Netherlands and Germany, the very stringent regulatory frameworks, severely hampering a widespread adoption of e-invoicing, were overhauled following the transposition of the Directive, with the objective to achieve a major reduction of the administrative burden on businesses. In the **Netherlands**, all restrictions previously imposed on e-invoicing, as opposed to paper invoicing, were removed (e.g. the requirement to present to the tax office the trading partners agreement on e-invoicing and to inform the tax authority of the intention to use an e-invoicing solution) as well as limitations on the channel and medium for issuing e-invoices. In **Germany**, the rules concerning the issuance and receipt of an e-invoice were significantly relaxed⁹³. Prior to the Directive, companies intending to use e-invoices had to either exchange them via an EDI platform – a technology which was used only by very large companies, especially in the automotive value chain – or using a QES fulfilling national specific requirements⁹⁴. This QES had to be provided by a certified service provider (*Zertifizierungsdiensteanbieter*), who had to be registered with the Federal Network Agency (*Bundesnetzagentur*). Invoices using any other kind of e-signature, let alone unsigned documents (e.g. PDFs via email), were not accepted as valid e-invoices. Currently, any QES technology or platform can be used, and unsigned e-invoices – PDFs sent via e-mail – can be considered as a valid document.

In **Poland**, the national legal framework on e-invoicing has been significantly amended following the transposition of the SID. The most important change was the introduction of the equal treatment of paper and e-invoices. The amendment made it possible to use PDF e-invoices for VAT deduction purposes. This resulted from the SID having introduced an e-invoice definition in the Polish legal framework. The rules on e-invoice acceptance have also been simplified: contrary to the past regulations, it can currently be implicit.

In **Portugal**, the transposition of the Directive into national law occurred within a context of deep reformation of the invoicing system for tax control purposes (the two relevant decree-laws were approved on the 24 August 2012)⁹⁵. Both the Directive provisions and the broader reform on the VAT invoicing system called 'e-fatura', aimed at fighting tax fraud and evasion, entered into force on 1st January 2013. The interlinkages between the two norms have affected the actual implementation of some e-invoicing provisions⁹⁶. The range

⁹³ *Steuervereinfachungsgesetz 2011 & Amtshilferichtlinie-Umsetzungsgesetz – AmtshilfeRLUmsG.*

⁹⁴ *Umsatzsteuergesetz §14 (3) 1. & 2., prior to the Steuervereinfachungsgesetz 2011, vom 1. November 2011.*

⁹⁵ On this date, the Ministry of Finance approved the Decree-law 197/2012, transposing into national legislation Council Directive 2010/45/EU of July 13 (*Ministério Das Finanças, Decreto-Lei n.º 197/2012 de 24 de Agosto*) as well as the Decree-law 198/2012, introducing the new system of electronic communication of the invoices (*Ministério Das Finanças, Decreto-Lei n.º 198/2012 de 24 de Agosto*).

⁹⁶ The e-fatura reform implied (i) mandatory invoicing across all sectors and transactions, even if not requested, (ii) a centralised VAT monitoring database, monthly receiving the essential elements of all invoices issued by companies through the Standard Audit File for Tax purposes (SAFT-PT) or web service; (iii) a system to electronically monitor goods in circulation, and (iv) a tax incentive for final consumers to ask for invoices in hard-to-tax sectors. Since then, additional incentives have been introduced each year, such as the so called 'Lucky Invoice Lottery' (*Fatura da Sorte*), and, to simplify matters, the tax authority has made available online a personalised, printable e-fatura card with the taxpayer fiscal number and a bar code for quick and accurate reading.

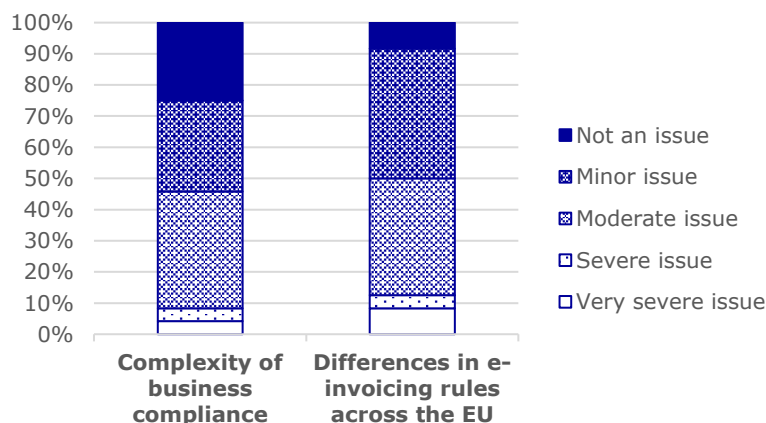
of means accepted for ensuring I&A of e-invoice has been broadened (adding e-seals according to Regulation 910/2014 and BCAT to the only two previously accepted methods, i.e. AES and EDI), but remains closed (as confirmed by the tax authority, no other means for ensuring I&A is accepted).

In **France**, e-invoicing is perceived as a fiscal control instrument⁹⁷, which led the legislator to adopt a stringent and detailed approach. As a result, a strict interpretation of different e-invoicing rules (i.e. the definition, the means for I&A, the use of BCAT) was deployed, which had to be progressively relaxed through various legislative amendments and the administrative doctrine (including almost ten official bulletins). Also in **Italy** e-invoicing is considered a tool to fight VAT fraud, but the objective is pursued not by a strict regulation, but by making its use mandatory, first for B2G, and then for B2B transactions in 2019. Thus, the legal framework was significantly simplified following the transposition of the Directive. While prior to it an e-invoice had to be signed with QES or transmitted via EDI, now companies can also use 'any means' and can prove I&A via BCAT. However, in practical terms, the impact has been less significant, as, even prior to SID, economic operators were allowed to exchange invoices via PDF and treat it as a 'paper invoice transmitted via electronic means'.

4.2.2 Ongoing complexity and fragmentation and remaining issues

Compliance with e-invoicing rules is currently regarded as rather straightforward in the EU. Out of 24 tax authorities that participated in the targeted consultation, only two regard the complexity of business compliance with national e-invoicing rules as a 'severe' or 'very severe' issue. The assessment is only slightly less positive in case of e-invoicing rules for cross border transactions.

Figure 20 – Tax authorities' perception of the ongoing severity of e-invoicing issues



Source: Targeted consultation.

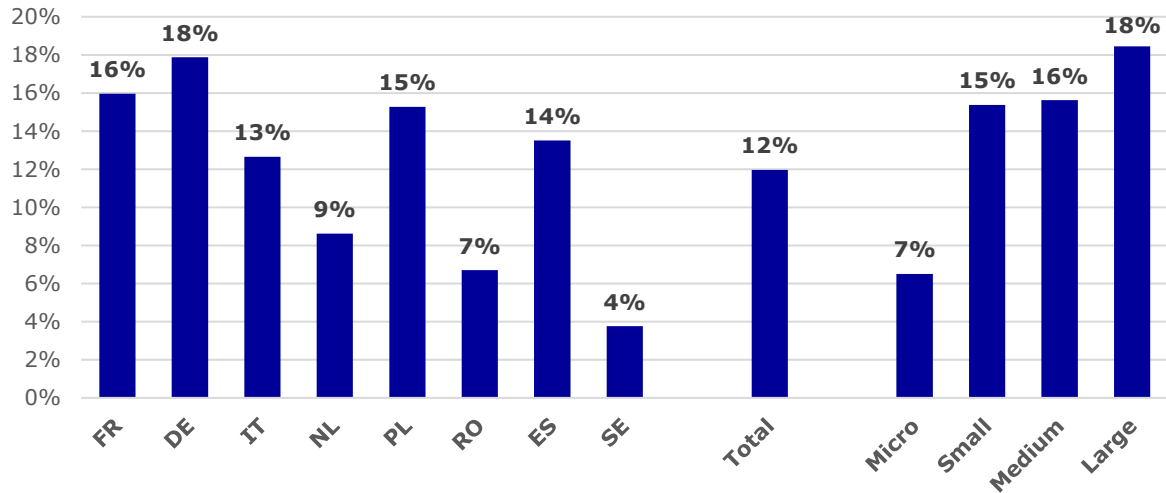
A similarly positive appreciation is shown by the business community. Indeed, according to the results of the business survey, **unclear legal requirements are the second-to-last least important obstacle to the use of e-invoicing**, being mentioned by as few as 12% of the interviewees. Differences in the implementation or the existence of country-specific requirements translate into a **differentiated perception of the severity of this barrier across Member States**. Between 16% and 18% of economic operators see legal requirements as a barrier in France and Germany, and less than 5% in Sweden.

The analysis by business size class shows that **unclear legal requirements represent a bigger barrier the bigger the company**, meaning they have the highest prominence among large enterprises and the lowest among micro ones. Based on the evidence gathered from the targeted consultation, this may be explained by two main factors. First, larger companies are comparatively more concerned with legal compliance, while micro firms tend to exchange unstructured e-invoices with a limited

⁹⁷ In France, provisions concerning e-invoicing were transposed by the tax control directorate (*Service du Contrôle Fiscal*), as e-invoicing was regarded as a tool for fiscal control. To the contrary, all other provisions of the Directive were transposed by the tax legislation directorate (*Direction de la Législation Fiscale - DLF*).

awareness of or compliance with the I&A requirements. Second, large companies are more likely to have a significant share of cross-border transactions, in which legal uncertainties may be felt more strongly. The latter is confirmed by the fact that 17% of the companies operating cross-border see legal uncertainty as a barrier, versus only 6% of domestic businesses.

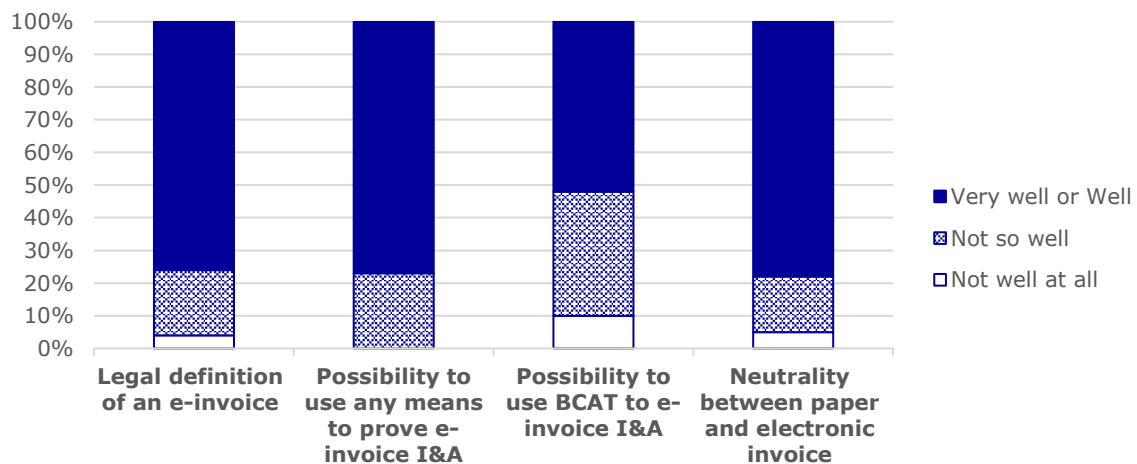
Figure 21 – Share of stakeholders assessing unclear legal requirements as a barrier to the use of e-invoicing, by Member State and size class



Source: Business survey.

Business stakeholders appreciate all provisions introduced by the SID, with the partial exception of the BCAT option. The assessment of the specific SID provisions on e-invoicing – i.e. (i) the legal definition, (ii) the possibility to use any means to prove I&A, and (iii) the equal treatment of paper and e-invoices – is positive for the vast majority of the business stakeholders (more than three-fourths). This is in line with the general view of stakeholders that e-invoicing rules have become easier to comply with. **These provisions are assessed to be working 'well' or 'very well', not creating legal uncertainty and having being supportive to the uptake of e-invoicing.** Differently, only about half of the respondents assess positively the possibility to use BCAT to prove I&A. Largely similar indications, but on a comparably less positive overall tone, emerge from the replies of business stakeholders to the PC.

Figure 22 – Business assessment of e-invoicing rules



Source: Targeted consultation.

A more detailed review of the stakeholders' appreciation of the four main legal amendments introduced by the Directive, together with the few criticisms raised, typically on the lack of guidance to support the actual implementation of some newly introduced measures or the existence of some legal gaps, are summarized below.

E-invoice definition. *The e-invoice definition is working well and has been crucial to promote e-invoice uptake, by allowing PDFs invoices to be considered as valid invoices across the EU.* Unlike Directive 2014/55 on the use of e-invoicing in public procurement, the VAT Directive does not distinguish between structured e-invoices and unstructured ones, but only a few interviewees suggest that this approach can create confusion or the risk of legal conflicts – which however did not occur over the last five years. **Most knowledgeable stakeholders indicate the existence of some gaps in the legal definition**, but these issues reportedly do not cause major difficulties or uncertainties to economic operators. In particular, some e-invoicing service providers remark the lack of clear identification of the 'original' invoice from a legal perspective in some specific cases; for instance, when different forms/formats are used in the invoicing process (e.g. in the case the provider transforms the format, or when the supplier issues an e-invoice both as PDF and XML) or when digitization activities are carried out ('*is a signed PDF of a scanned invoice an original?*'). In a few cases, such as Italy⁹⁸ and France⁹⁹, these issues required the intervention from the tax authority.

Freedom of evidence. *The technological neutrality principle enshrined in the freedom of evidence provided in Article 232 works well*, by striking a balance between the inclusion of 'safe harbours' for legal certainty, and the need to leave businesses free to choose their own means for proving e-invoice I&A. The very few criticisms recorded on this provision concern **its vagueness and the lack of guidance and of clear examples of other technologies and/or procedures** that could be used to prove e-invoice I&A. This generates a degree of uncertainty about how to demonstrate legal compliance when 'other means' are used. A couple of tax authorities also report the existence of similar issues, which, however, remain more on a theoretical than practical level. Indeed, no single economic operator reports difficulties related to this aspect, not even in the few Member States that have not fully recognised the taxpayers' freedom of choice over the solutions to prove I&A¹⁰⁰.

Neutrality between paper and e-invoices. *Stakeholders acknowledge that the equal treatment of paper and e-invoices has been a clear achievement of the Directive.* In this case, the very small number of complaints voiced by the interviewees focus on the **not fully adequate national implementation of this principle, due to the adoption of discriminatory rules in other legislative areas or enforcement practices in some Member States**. For instance, some German respondents stress that the GoBD archiving requirements for storing electronic documents, thus including e-invoices, are much more stringent compared to the regime for paper invoices. Across various countries, a few interviewees report that, even though the regulatory framework sets a level playing field, tax auditors may examine the records and the business organisation more carefully when the invoices are exchanged electronically, somehow violating the neutrality principle at enforcement level. This is, for instance, the case of Poland, where one of the obstacles to the replacement of paper with e-invoices seems

⁹⁸ In Italy, *Circolare 12/E dell'Agenzia delle Entrate*, 3 May 2013.

⁹⁹ In France, it was clarified that for an invoice to be considered an e-invoice, the entire invoicing process, including creation and archiving, must be done electronically; thus, a paper-based invoice, scanned and sent via email as a PDF attachment is not considered an e-invoice (see DGFIP TVA - *Régimes d'imposition et obligations déclaratives et comptables - Règles relatives à l'établissement des factures électroniques - Dispositions communes aux procédures de transmission des factures par voie électronique* - BOI-TVA-DECLA-30-20-30-10-20180207, published on February 2018).

¹⁰⁰ Czech Republic, France, Hungary, and Portugal.

to be the reluctance of companies to move away from long-established practices, including the printing – common among SMEs – of all PDF invoices. This is due to the fear that, during a tax control, only paper invoices would be treated as legitimate, and that the inspectors could ask to print all PDF documents anyhow. However, such an attitude has reportedly largely disappeared over the past years, as most of the tax inspectors with modern analytical tools would audit e-invoices, and only a few of them still request printouts.

BCAT. The vagueness of the BCAT option and the lack of some practical definitions and examples of 'business controls' and 'reliable audit trail', in the Directive as well as in the Explanatory Notes has been lamented by a number of stakeholders. A slight majority of Member States (16) attempted to fill this gap through secondary legislation as well as guidance documents, providing more or less detailed instructions on how business controls can be implemented in practice (examples of more elaborated documents are provided in Box 7 below).

Box 7 – BCAT guidance in selected Member States

In **Austria**, the VAT Guidelines (*Umsatzsteuerrichtlinien*) define the in-house business controls as a monitoring procedure that allows the supplier to match an invoice with his claim to receive a payment, and the customer to match an invoice with his obligation to pay. One example of such a control is the manual comparison of an invoice with other business documents, such as an order, contract, or delivery receipt.

In **Belgium**, the VAT practice note n°14/2104 dated 4 April 2014 (E.T.120.000) on (electronic) invoicing provides various examples of BCAT, such as: (i) two-way or three-way matching process of relevant business documents; and (ii) audit logs of changes performed on invoices and related documents within the company's ERP system during the archive period or to the ERP master data itself. In order to assess the suitability of the internal processes and business controls, companies can either perform self-assessments, or rely on third parties.

In **Italy**, Circular 18E of 24 June 2014 provides an example of a fully compliant 'management control system' to ensure a reliable audit trail, consisting of (i) an ERP system to manage all the business processes (sales, purchases, stocks, accounting, etc.); and (ii) audit logs to register any changes made to the documents and data within the ERP system and to keep track of all operations, such as the matching of an invoice with the relevant payment.

In **France**, the Official Tax Bulletin 30-20-30-20 dated 7 February 2018 states that it is the taxable person's duty to set up the most appropriate BCAT, based on a number of parameters such as the business's size and the volume of invoices. For instance, for a very small company, it will be sufficient to manually match each invoice with its relevant documentation (purchase order, delivery note, proof of payment, etc.), ensuring that the correspondence between two documents is always demonstrable in both directions.

In the **UK**, VAT Notice 700/63 of 22 May 2015 provides that in order to use a supporting document (for example, a contract or a delivery note) to verify the data on an invoice, a company should put in place internal controls ensuring the reliability and independence of the supporting document itself. While each company is left free to decide the most appropriate procedures, three examples are provided, namely: (i) system controls, such as those preventing a sales order from being changed after the invoice has been issued; (ii) procedural controls, for instance that a purchase order must be issued before an invoice is received; and (iii) authorisation controls, such as preventing a user with access to a supplier's master data from entering invoices from that supplier.

Despite these national efforts, **in most cases, economic operators do not regard the guidance provided on BCAT as adequate or sufficiently clear, which translates into serious doubts on the proper application of this option on the taxpayer's side, and a perceived higher risk of failing tax audits.** Besides the limited guidance, economic operators lament the impossibility of receiving prior approval from the tax authority for a proposed compliance solution or method. This issue is perceived as comparatively less severe in the Nordic countries, where documenting internal controls to provide reasonable assurance regarding the reliability of financial reporting is an established business practice, and it is not specifically linked

to e-invoices¹⁰¹. The opposite situation was detected in France, where a peculiar and stringent approach towards the implementation of the BCAT option has been adopted (as illustrated in Box 8). **Despite these widespread criticisms, the problems for economic operators remain largely theoretical and of limited significance**, as, for the time being, the vast majority of firms (especially among small and micro) have been unaware of or unwilling to implement BCAT even when required (e.g. when exchanging unsigned PDF invoices). According to the result of the targeted consultation, as little as 15 economic operators out of 83 report to have set-up internal controls to demonstrate that the e-invoice content cannot be altered, and none among small and micro¹⁰².

Box 8 – France stringent approach to BCAT

In France, the tax authority adopted a stringent approach towards the use of BCAT. First, the adoption of internal business controls is regarded as mandatory for all taxpayers exchanging paper invoices as well as e-invoices¹⁰³, except if a QES or an EDI, fulfilling some specific additional requirements, is used¹⁰⁴. Second, even though according to the recent administrative doctrine¹⁰⁵, in principle, the preparation of a written document illustrating the BCAT procedure is not obligatory, in practice, business controls have to be documented (*'documentés'*). Consequently, such additional information obligation applies to most of the taxpayers, with the possible exclusion of micro enterprises, which are allowed to orally present the control procedures in case of audits¹⁰⁶. Finally, fiscal controls on BCAT for large enterprises have started about two years ago and are rather systematic, while for SMEs they have not yet really started. So far, companies without proper BCAT have not been sanctioned. This is expected to change in the near future, when the lack of proper BCAT, even when there is no evidence of tax fraud, will reportedly produce negative consequences for the taxpayers¹⁰⁷. Accordingly, severe criticisms have been raised by domestic large firms. Complaints on the lack of clear instructions and/or assistance from the relevant authorities (preliminary approval of procedures regarded as accepted *'tampon'*) are coupled with gripes on the high costs incurred to set up a proper BCAT system.

¹⁰¹ For instance, in Sweden, existing rules concerning accounting material were deemed sufficient and applied equally to e-invoices. Under these pre-existing rules, accounting material must be correct and unchanged so that it can be verified for accounting purposes (e.g. The Board of Directors is responsible for internal control over financial reporting pursuant to the Swedish Companies Act and the Swedish Corporate Governance Code). In the Netherlands, yet in 2005, the Dutch Tax and Customs Administration introduced a new form of supervision of taxpayer compliance with tax obligations: the so-called 'horizontal monitoring'. As part of this new approach, the Tax and Customs Administration makes the maximum possible use of the 'in-house' supervision (internal control and internal audits), and the taxpayers are bound to provide for an internal control system, internal audits, and external audits (for more information, please refer to Committee Horizontal Monitoring Tax and Customs Administration, Tax supervision – Made to measure. Flexible when possible, strict where necessary, The Hague, June 2012).

¹⁰² 13 large firms and 2 medium-size businesses.

¹⁰³ Such an interpretation is also present in Hungary. Some stakeholders actually argue that this would be the correct interpretation, while the adoption of BCAT only in case of e-invoicing (as assumed by the vast majority of Member States) violates the neutrality principle imposing an additional requirement exclusively for the use of e-invoice, which largely weigh on SMEs, which are less prone to adopt the other, more 'sophisticated' methods, such as e-signature and EDI.

¹⁰⁴ In France, with reference to the use of EDI, the preparation of (i) a summary list, and (ii) a fichier of trading partners is required to guarantee the e-invoice I&A (the so called 'EDI fiscale') If EDI requirements are not fulfilled, the EDI (which in this case is called 'EDI light') needs to be accompanied by a BCAT (see DGFIP, TVA - Régimes d'imposition et obligations déclaratives et comptables - Règles relatives à l'établissement des factures - Factures électroniques - Factures transmises sous la forme d'un message structure (BOI-TVA-DECLA-30-20-30-40-20131018, published on 8 October 2013).

¹⁰⁵ Official Tax Bulletin 30-20-30-20 dated 7 February 2018.

¹⁰⁶ See DGFIP, TVA- Régimes d'imposition et obligations déclaratives et comptables - Règles relatives à l'établissement des factures - Factures électroniques - Factures sécurisées au moyen de contrôles établissant une piste d'audit fiable (BOI-TVA-DECLA-30-20-30-20-20180207, published on 7 February 2018).

¹⁰⁷ See DGFIP, TVA - Régimes d'imposition et obligations déclaratives et comptables - Règles relatives à l'établissement des factures - Factures électroniques - Contrôle par l'administration des procédés permettant d'assurer l'authenticité de l'origine, l'intégrité du contenu et la lisibilité des factures (BOI-TVA-DECLA-30-20-30-50-20180207 TVA published on 7 February 2018).

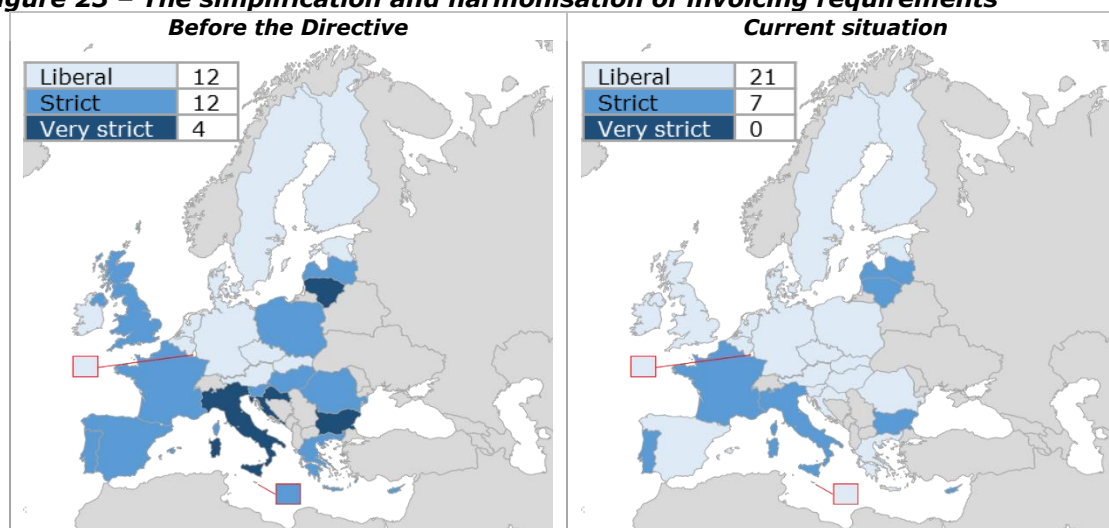
4.3 Invoicing rules

4.3.1 Changes in regulatory complexity and fragmentation and Directive's role

The changes caused by the Directive to the national frameworks over the last five years came a long way in simplifying and harmonising invoicing rules. This is shown in Figure 23 below, which depicts how stringent national invoicing rules were prior to the SID, and currently are, after its transposition. **Most of Member States have converged towards the adoption of more liberal invoicing rules**, in line with the minimum implementation of the Directive.

The simplification and convergence process is measured by a **composite index of the overall strictness of the national invoicing requirements affected by the SID**¹⁰⁸. The index can have three values: (i) liberal; (ii) strict; and (iii) very strict. The strictness is defined in terms of the extent to which the Member States have not gone beyond the minimum SID requirements and made use of its full simplification potentials. The analysis relies on the results of the legal mapping described in Section 3 above. Importantly, the classification does not have any prescriptive value, and by no means suggests that a liberal framework is better or worse than a strict framework. Furthermore, this index should not be used to measure the strictness of invoicing rules in general, as it only covers the invoicing provisions amended by the SID¹⁰⁹.

Figure 23 – The simplification and harmonisation of invoicing requirements



Source: Authors' own elaboration.

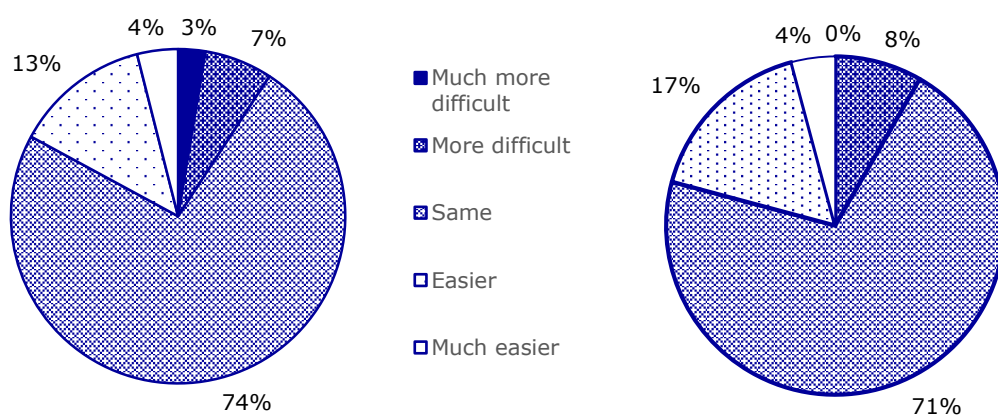
The index shows that **the national invoicing frameworks have become more liberal following the implementation of the Directive**. This results from the joint effect of: (i) the Directive revision; (ii) national decisions on how to implement optional simplifications; and (iii) national interventions in areas in which the Member States still retain discretionary power. While, in 2013, most of Member States (16) fell in the strict or very strict categories, **five years later the majority of them (21) fall in the liberal category**. In addition, no Member State belongs to the 'very strict' category any longer (four of them did so in 2013).

¹⁰⁸ Namely: (i) the content of invoices; (ii) requirements on invoicing of financial services; (iii) simplified invoices; (iv) summary invoices; (v) self-billing invoices; (vi) timing; and (vii) translations of invoices. For the full analysis, cf. Annex C.1

¹⁰⁹ For instance, the situation in Hungary after the SID was classified as liberal despite the introduction of additional reporting requirements, since they do not fall within the rules covered by the SID.

As for the practical changes for economic operators, about **three quarters of the business stakeholders comment that the degree of complexity of issuing a standard invoice for domestic transactions has not significantly changed after the introduction of the Directive**, with about 15% of them seeing an improvement, and 10% seeing it as more complex¹¹⁰. With respect to cross-border transactions, **about 20% of them have seen an improvement over the last five years, while for 70% the situation has remained largely the same**. This finding may be explained by the fact that, for most companies, **invoicing rules did not pose significant problems even prior to the SID**. Hence, the limited improvements perceived should not need to be interpreted as a negative outcome. At the same time, the small magnitude of pre-existing problems and of the improvement does limit the simplification potential that could be achieved by the Directive.

Figure 24 – Evolution of invoicing rules for domestic (left) and cross-border (right) transactions



Source: Targeted consultation of economic operators.

4.3.2 Ongoing complexity and fragmentation and remaining issues

4.3.2.1 Invoice issuance and content

The stakeholders do not perceive compliance with VAT rules for standard invoices as complex. This results from the combination of the following findings:

- **Two-thirds of the companies and business federations interviewed do not point out to any invoicing requirement which is either too complex or excessively burdensome.** This does not mean that invoicing is easy for each transaction or each company. However, invoicing is a key routine activity, and compliance with the applicable rules has become a steady part of a firm's knowhow, so that it poses no significant problems for most of the transactions. This may not be the case for 'special' transactions, such as those that have recently become subject to the domestic reverse charge in a number of Member States. However, here the problems do not lie in the invoice itself, but rather in the underlying VAT provisions governing certain regimes (e.g. the identification of the transactions to which domestic reverse charge applies).

¹¹⁰ Participants to the public consultation were more optimistic, with about 40% considering that the complexity has remained the same, and 50% considering that it became easier. However, in this case, it was not possible to further discuss answers to identify whether they referred to invoicing rules *per se*, or other VAT rules or adjacent legislation.

- **Neither tax authorities nor business stakeholders consider compliance with invoicing rules as a severe source of problems.** Only 20% of the respondents consider compliance with invoicing rules as a 'severe' or 'very severe' problem for companies. Again, when entering more in detail about the root causes of the problem, most of the respondents point to other areas of the VAT legislation as the source of their concerns, rather than to specific invoicing provisions themselves. As commented by one business federation, '*compliance with VAT invoicing rules is not a major issue; problems rather emerge from the complexity of tax audits and other administrative requirements, such as archiving rules*'.

Compliance with invoicing provisions for cross-border transactions is considered more of an issue compared to domestic invoices. This is not an unexpected finding, given that cross-border VAT rules are obviously more complex. Nevertheless, **differences are not very large.** About 25% of stakeholders consider that differences in invoicing rules across the EU create a problem for companies, that is 5% more than for invoicing requirements in general. Combined with the detailed qualitative comments discussed below, this suggests that a limited number of specific cases may create significant problems for cross-border operators, while, in most cases, no major compliance issues for cross-border invoices persist.

Content of standard invoices. With specific reference to the working of the norms governing the content of standard invoices – that is Article 226 – business stakeholders express an overly positive assessment¹¹¹, as only 15% consider that they do not work so well or not well at all. Notably, none of the VAT practitioners interviewed gives this provision the lowest grade ('not working at all').

The main critique on this provision voiced by stakeholders does not concern the Directive itself, but the 'formalism of tax authorities' in enforcing Article 226. This critique refers to tax authorities challenging purchase invoices as invalid, hence denying the right to VAT deduction, based on the non-compliance with formal invoice requirements. This is not a widespread problem in the EU, as the majority of stakeholders do not perceive their tax authorities as formal in this respect (e.g. in the Netherlands) or point out that formal errors are scrutinised mainly if they represent a signal of a fake underlying transaction (e.g. in Italy). In the two Central-Eastern European countries covered by the fieldwork (Romania and Poland), the opinion was mixed, as only some stakeholders complain about the risk of formal errors leading to the loss of the right to deduction. Among fieldwork Member States, the problem is considered significant in Germany, and, to a lower extent, in Portugal. However, the judgments of the CJEU, described in Box 9, have been contributing to change both the national invoicing rules and the related enforcement practices¹¹².

¹¹¹ VAT practitioners in the targeted- and business stakeholders in the public consultation.

¹¹² Cf. e.g. the recent decree issued by the Dutch Ministry of Finance (*Besluit van 10 oktober 2017, Wijziging van het besluit van 6 december 2014, nr. BLKB2014/704M, Stcrt. 2014, 36166*) which, among others, announces an adjustment concerning the handling of invoices containing defects in line with the recent European case law, which has shown that the right to deduct VAT cannot be refused on the bare ground that an invoice does not meet all formal requirements, provided that other data are available to determine whether the material conditions for right to deduct are met. A recent ruling by the German Federal Tax Court (*BFH-Urteil vom 21.6.2018, V R 25/15 (veröffentlicht am 1.8.2018)*) states that for the deduction of VAT it is not obligatory that the address on the invoice is the address, at which the providing business conducts its economic operations, hence a postal address is sufficient if the operator can be contacted there. The relaxation of formalism only concerns the address of the contractor on the invoice.

Box 9 – The CJEU jurisprudence on invoice content

The CJEU has been repeatedly called to judge on the **compatibility of certain national provisions denying a taxable person the right to deduct VAT in case of non-compliance with the provision of the VAT Directive**¹¹³. The stream of jurisprudence concerns both the invoicing provisions as amended by the SID, as well as the rules previously in force¹¹⁴.

The CJEU has repeatedly held that:

- the right of deduction is an 'integral part' of the VAT system; and
- that the 'neutrality of VAT', i.e. the possibility for taxable persons to deduct the VAT paid on their supplies from the VAT due, is a fundamental principle of the system, so that the deductibility should be warranted when the substantive requirements are satisfied, even if 'some' formal conditions are not fulfilled¹¹⁵.

Based on these principles, **the CJEU invariably denied the compatibility with the above-mentioned EU provisions of national provisions denying the customer's right of deduction in case of incorrect invoices**, both where the invoice was formally incorrect¹¹⁶ and when problems concerned other aspects¹¹⁷ (such as the other VAT formalities to be met by the supplier¹¹⁸ or the customer¹¹⁹, the nature of the supplier's activities¹²⁰, or the VAT regime applied¹²¹). The only case in which national provisions denying the right of deduction because of non-fulfilment of VAT formalities were not found incompatible, concerned a taxable person that had 'fraudulently failed to fulfil most of the formal obligations incumbent upon him in order to be able to benefit from that right'¹²².

The Court repeatedly stated that a formally incorrect invoice is not a sufficient ground to deny deduction, provided that the claimant could demonstrate that the supply in question (i) was carried out by a taxable person acting as such; and (ii) that it was used for his/her economic activity. While, on one side, this points to excessively formalistic national frameworks and enforcement practices being incompatible with the EU invoicing rules, it somehow calls into question the overall approach of the Directive. Indeed, one could question why detailed rules on invoicing issuance and content should be spelled out in details, if, eventually, non-compliance with those rules is hardly ever leading to the invoice not being considered a valid document for proving the right of deduction. True, the national legislators can impose administrative penalties for non-compliance for invoicing requirements, but they represent a far lower incentive, because of the far lower monetary risk, for taxable persons to comply. At the extreme, one could even question why an invoice is needed in the first place, provided that other forms for proving compliance

¹¹³ Namely: (i) Article 178 requiring that, for the purposes of deductions, the taxable person must hold an invoice drawn in accordance with the relevant provisions of the VAT Directive; (ii) Article 220, where the cases for which an invoice is or can be made mandatory are defined; and (iii) Article 226, where the content of the invoice is regulated.

¹¹⁴ Cf. the following cases: (i) C-368/09, Pannon Gép Centrum Kft v. APEH Központi Hivatal Hatósági Főosztály Dél-dunántúli Kihelyezett Hatósági Osztály, 15.7.2010; (ii) C-385/09, Nidera Handelscompagnie BV v. Valstybinė mokesčių inspekcija prie Lietuvos Respublikos finansų ministerijos, 21.10.2010; (iii) C-280/10, Kopalnia Odkrywkowa Polski Trawertyn P. Granatowicz, M. Wąsiewicz spółka jawna v. Dyrektor Izby Skarbowej w Poznaniu, 1.3.2012; (iv) Joint Cases C-80/2011 and C 142/2011, Mahagében kft v. Nemzeti Adó- és Vámhivatal Dél-dunántúli Regionális Adó Főigazgatósága and Péter Dávid v. Nemzeti Adó- és Vámhivatal Észak-alföldi Regionális Adó Főigazgatósága, 21.6.2012; (v) C-324/2011, Gábor Tóth v. Nemzeti Adó- és Vámhivatal Észak-magyarországi Regionális Adó Főigazgatósága, 6.9.2012; (vi) C-516/2014, Barlis 06 – Investimentos Imobiliários e Turísticos SA v. Autoridade Tributária e Aduaneira, 15.9.2016; (vii) C-518/2014, Senatex GmbH v. Finanzamt Hannover-Nord, 15.9.2016; (viii) C-332/2015, v. Guiseppe Astone, 28.7.2016; (ix) C-101/2016, SC Paper Consult SRL v. Direcția Regională a Finanțelor Publice Cluj-Napoca, Administrația Județeană a Finanțelor Publice Bistrița-Năsăud, 19.10.2017; and (x) Joint Cases C-374/2016 and C-375/2016, Rochus Geissel v. Finanzamt Neuss and Finanzamt Bergisch Gladbach v. Igor Butin, 15.11.2017.

¹¹⁵ Cf. i.a. C-518/2014, at § 37 and 38.

¹¹⁶ E.g. insufficient description of the goods / services provided (C-516/2014), lack of addressee's tax number or VAT registration number (C-518/2014); insufficient accuracy of the customer's address (C-374 and 375/2016).

¹¹⁷ When substantive problems emerged on the nature of the transaction or of the supplier, the taxable person demanding deduction should prove that he/she knew or ought to have known 'that the transaction relied on as a basis for the right to deduct was connected with fraud committed by the issuer of the invoice or by another trader acting earlier in the chain of supply.' Cf. i.a. 80 and 142/2011, at § 49.

¹¹⁸ As in the case of an invoice issued by a supplier declared 'inactive' (C-101/2016).

¹¹⁹ C-385/2009; C-208/2010.

¹²⁰ C-80 and 142/1011.

¹²¹ C-264/2015.

¹²² C-332/2015, at § 59.

with the substantive requirements for VAT deduction can be produced by the taxable person. However, the Court was never called to interpret the VAT Directive on a similar case.

During the targeted consultation, several tax authorities underlined that the approach of the CJEU creates a degree of risk from the point of view of tax control. Indeed, even considering the legal and technological evolution, **the invoice is still seen as a key piece of information to prevent VAT frauds**, and, in particular, the deduction of VAT which had not been paid. One contributor pointed out that invoices are still a necessary tool for tax control purposes, and, at a minimum, they should include five key pieces of information: (i) the identification of the supplier; (ii) the identification of the customer; (iii) the description of the transaction; (iv) the price paid; and (v) the VAT due. According to this contribution, these pieces of information must be correctly included in an invoice, or the whole point of having an invoice for tax control purposes would become irrelevant.

Few other problems or legal disputes were mentioned by a minority of stakeholders concerning the content of standard invoices, and namely:

- **the description of the goods or services provided.** While this is obviously linked to the above-described formalism, it was also mentioned in some Member States in which the latter was not commonly perceived as a problem. The issue concerns the criteria for which the description of the services¹²³ provided in a purchase invoice can be considered detailed enough to allow verifying that the substantive requirements for deduction are met. It has been pointed out that there are no clear guidelines, either from the European Commission or national authorities, in this respect. Furthermore, it was suggested that too much of a detailed description may prevent the use of simplified invoices, which are significantly more compact documents.
- **the date of the transaction.** Article 226(7) requires putting the date of the transaction on the invoice, but, for certain transactions (e.g. delivery of goods with transport) trading partners may not be aware when the good was shipped / received or when the transfer of ownership took place. Certain stakeholders suggested to provide a clear guidance on the subject.

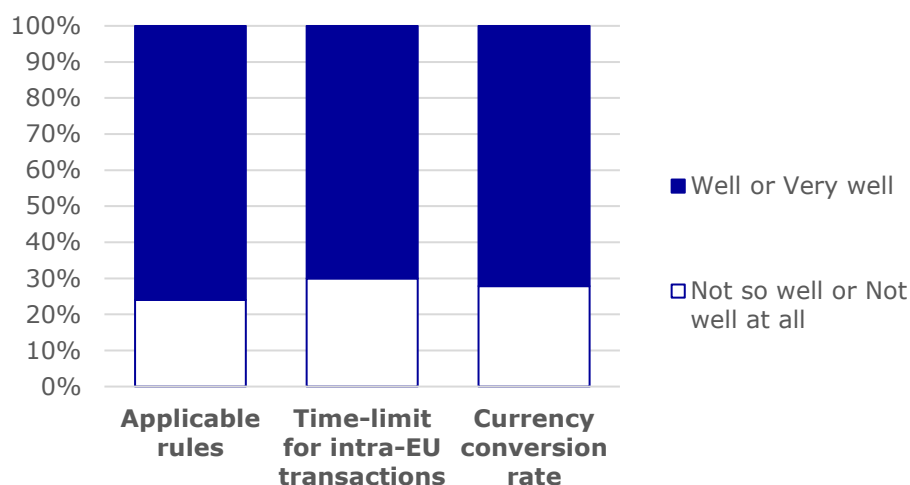
Issuance of invoices by providers of financial services. No issues were detected about the issuance of invoices by providers of financial services. Even though the SID changed the applicable provisions, no legal disputes or lack of clarity was reported either by the financial institutions (or their business associations), or by their customers.

4.3.2.2 Cross-border provisions

Based on the prioritization presented in Box 4 above, the following cross-border provisions have been investigated in detail: (i) article 219a on the **applicable invoicing rules**; (ii) the new uniform **time limit** for the issuance of invoices for intra-EU transactions; and (iii) the inclusion of the **ECB exchange rate** among the currency conversion methods. As shown in Figure 25 below, **more than 70% of the business stakeholders interviewed consider these rules to work well or very well**. The stakeholder's assessment is as positive as for the provisions on invoicing issuance and content, and on specific invoicing regimes.

¹²³ It is reportedly less of a problem for goods, the physical description of which can more easily included in the invoice, or result from the attached document (e.g. delivery notes).

Figure 25 – Stakeholders’ assessment of the working of amended provisions on cross-border invoices



Source: Targeted and public consultation.

As for the **remaining issues** identified by those stakeholders which expressed some concerns, they can be summarised as follows:

- On the **applicable invoicing regime**, the new rule was considered as potentially complex, especially in situations where the supplier’s establishment in the destination country is involved¹²⁴. Nevertheless, in the practice, this rule was, for most of transactions, straightforwardly applied by economic operators and enforced by tax authorities¹²⁵. Importantly, applicable national invoicing rules were not a major source of concern even prior to the SID: provided that the invoice included the necessary information to identify the supplier, the customer, and the underlying transaction, it would have hardly, if ever, been challenged based on its conformity with another set of national rules¹²⁶.
- As for the **time limit for intra-EU transactions**, it is maintained that companies usually wish to issue their invoice as soon as possible, which is an incentive for self-compliance. Only in certain cases (e.g. field missions, certain types of contracts in which the price becomes known only at a later date), the time limit cannot be met; however, it is pointed out that tax authorities would tolerate reasonable discrepancies more often than not, hence the problem remains largely theoretical.
- On the **conversion rate**, several companies mention that some complexity arises when internal company rates cannot be used, as it is the case in some Member States (e.g. in Poland). They also make the point that the Directive does not specify the reference period of the rate to be used; if authorities require to apply a daily rate, this can be sometimes cumbersome to comply with. However, in several countries, practical solutions have been put in place to solve the problems. For instance, in Germany, the Ministry of Finance publishes monthly rates that can be used for conversion.

¹²⁴ Desmeytere, I. (2011), Working paper on EU Directive 2010/45/EU – Attention points for Member States when implementing Directive 2010/45/EU, at p. 17 and ff.

¹²⁵ With respect to the fieldwork Member States, a legal dispute was discussed with one tax authority, which concerned Article 219a. The applicable territorial rules, determined in line with the article, led to the double counting of the taxable added value. The transaction scheme subject to the dispute was specific and uncommon, and the Tax Authority still has to provide a clarification on it.

¹²⁶ Cross-border legal conflicts were reported on, other, non-invoicing, VAT rules, such as the nature of services subject to reverse charge, where the national legislation and practices are not fully aligned.

Other problems with respect to cross-border invoices in general have been identified by a minority of stakeholders, but they mostly concern aspects which are not within the scope of the SID, such as the VAT registration thresholds for cross-border operators, the norms applicable to B2C distance selling, and the threshold for companies to obtain a VAT number. As for the latter, in some Member States, very small companies and self-employed are not assigned a VAT number. In the countries where all economic operators have a VAT number, the seller may thus have difficulties in understanding whether the transaction should be considered as B2B or B2C, and thus the applicable VAT regime.

4.3.3 Relevance of specific invoicing regimes

4.3.3.1 Simplified invoices

Uptake and Directive Role. Detailed statistics on the use of simplified invoices at EU or national level are lacking. Available evidence from the fieldwork Member States indicate that the uptake of this regime varies both across industries and countries. This suggests that simplified invoicing is, on one side, only relevant for a subset of economic operators and, on the other, that national business attitude and implementation strategies play a role in its uptake.

Simplified invoices are commonly used in specific sectors only, such as accommodation and restaurant, retail trade and petrol stations, and transport services, which feature a high number of low value deals and a relatively higher importance of B2C transactions. When a taxable operator deals mostly with low-value and B2C transactions, simplified invoicing can even be the default regime, with standard invoices only rarely used, or not at all. Furthermore, the taxable persons in these sectors usually operate cash registers, which can be adapted so to issue both receipts and simplified invoices, and this makes the use of the latter far more convenient.

From a geographical perspective, the fieldwork has shown that the uptake of this regime is uneven, being more commonly used – albeit always sector-specific – in countries such as Germany, Portugal, Romania, and the Netherlands, and very uncommon in other countries, such as Poland or Italy. In France, the uptake is largely limited to restaurants, and reportedly in decline. **Cross-country differences in the uptake are partly explained by the invoicing details.** In the low-uptake countries, i.e. Poland and Italy, Member States went beyond the minimum content requirements of Article 226b, and simplified invoices must include some form of customers' data, such as his/her VAT number. To the contrary, in high-uptake Member States, no customers' data are required on simplified invoices. Indeed, the real time-saving due to the use of simplified invoices arises when they can be issued without interacting with the client. When customers' data must be included in simplified invoices, their appeal becomes much lower¹²⁷.

External factors also explain the limited uptake in certain Member States, namely:

- The **acquaintance of economic operators with this regime.** In countries where simplified invoices were not allowed prior to the SID, such as Italy, or only for very low amounts, such as Poland, the awareness of this regime is low, and so its usage.
- Connected to the above, simplified invoices, as any other non-standard regime, are sometimes considered 'suspicious'. Where compliance with the fiscal rules is

¹²⁷ See Section 6 below.

considered at times uncertain, as in Italy, **operators prefer to remain with their own routines**, which have already been tested as lawful. Even companies which would benefit from the use of simplified invoices, may prefer to continue issuing and receiving standard ones, just to be 'on the safe side'.

While the use of simplified invoicing is uneven across sectors and countries, **the increase in its uptake is generally acknowledged**, as more than 50% of the respondents consider it to have grown over the last years. The growth does not concern, obviously, the Member States in which the uptake is still negligible, such as Italy and Poland. **In the countries where it is commonly used, the growth is largely linked to the recent legal reforms, i.e. both the Directive provisions and further national actions.** In some countries, such as Romania, Portugal and the Netherlands, the implementation of the Directive increased the scope of this regime and, consequently, its usage. In Portugal, the reform went much further than the Directive minimum requirements, in line with the general invoicing reform adopted therein. In Germany, the national legislation already met the minimum Directive requirements, and the increase in the scope of the regime was mainly determined by a national decision, which, in 2015, brought the ceiling to EUR 250 up from 150¹²⁸. Finally, in France, the simplified invoicing regime remained substantially unaltered, as the existing national rules already met the Directive minimum requirements.

Directive provisions and remaining issues. The rules on the issuance and content of simplified invoices are considered to 'work well' or 'very well' by about three quarters of the stakeholders¹²⁹. Few respondents complain about the scope, which could be increased; however, this represents a minority view. Tax authorities in fieldwork Member States have not reported any significant legal dispute. In Romania, some stakeholders expressed concern on whether the customer's VAT number should be included in simplified invoices, as this is not among the mandatory elements, but it is necessary if the customers want to deduct VAT.

4.3.3.2 Summary invoices

Uptake and Directive Role. Summary invoices can reduce, sometimes significantly, the number of invoices issued and received by economic operators having long-term business relationships with a stable supply chain. However, the relevance of summary invoices to business' needs is hardly supported by evidence about their current uptake and the recent trends. Indeed, **summary invoices seem not very commonly used by stakeholders**. Their uptake is considered as limited or very limited by more than 50% of the stakeholders. The assessment is, however, uncertain, with inconsistent answers within the same Member State, depending on the practical experience of the stakeholder at hand. Indeed, a summary invoice is no different from a standard one, as – compared for example to self-billing or simplified invoices – it bears no specific clauses / keywords, and does not need to be handled differently than a standard document. The only difference is in the description of the goods or services provided, which makes reference to multiple supplies. Summary invoices remain mostly a **sector specific tool, more commonly used for the provision of goods rather than services, and in specific sectors** (e.g. petrol stations, utilities, large wholesalers).

In terms of evolution, **the vast majority of stakeholders saw no change in their usage, confirming that the modifications introduced by the Directive did not have a significant effect on this regime.** In some countries, additional legal requirements may apply, but this apparently do not have a clear effect on the uptake.

¹²⁸ As described above, in Italy the Directive led to the introduction *ex novo* of simplified invoicing, while in Poland it greatly increased its scope of application.

¹²⁹ VAT practitioners in the targeted consultation and business stakeholders in the public consultation.

In Italy, Portugal, and Romania, transport documents or delivery notes for each shipment must be attached to the summary invoice; however, this is not perceived as an obstacle for its use, as goods always travel with some kind of receipt to demonstrate shipment or arrival. *A contrario*, where this requirement was removed (as in France), it reportedly generated no additional uptake. **The real resistance to summary invoices seems not to originate from the applicable legal requirements**, but rather from the business interests and habits to issue an invoice per each transaction, and as soon as possible, as the invoice kicks off the payment process (and the payment terms), while invoices would imply a delay in this respect.

Directive provisions and remaining issues. About two-thirds of stakeholders report no concerns with respect to the rules on summary invoices¹³⁰. The only concern that is expressed by few stakeholders is about the trade-off between the use of summary invoices and the detailed description of the goods or services provided, that may be subject to verification during audits. These stakeholders comment that a formalistic approach to the verification of this invoice datum may further lower the business interest in using summary invoices. No legal disputes on summary invoicing were reported by tax authorities in fieldwork countries.

4.3.3.3 Self-billing

Uptake and Directive Role. The self-billing regime does not seem to presently address a need felt by the overall business population. **The use of the self-billing regime is indeed concentrated in very few industries, or, more precisely, in very few companies within specific industries.** It is commonly used when very large companies – mostly in the manufacturing sector, and, in particular, the automotive industry – impose self-billing on their vast range of suppliers, as a way to receive all invoices in a single, and usually automatically processable, form. Another reason why self-billing is very useful for large manufacturers is their reliance on call-off stocks arrangements, where it is the customer determining how many goods should be delivered and when out of the stocks that the suppliers put at its disposal¹³¹. Other than these situations, self-billing is used when the price for a supply can be determined only ex post. This is, for example, the case of trade agents, whose remuneration is usually determined by their mother company based on the amount of goods or services sold to the final customers by the end of a given period, or of online services, such as advertisement, for which the remuneration is usually determined accounting for the clicks and visualisation received over a certain amount of time.

Taking into account how 'specialised' the use of self-billing is, it comes as no surprise that almost four-fifths of the tax authorities, VAT practitioners and business federations interviewed consider **its uptake within the overall economy as 'limited' or 'very limited'**. The fieldwork suggested that it is comparatively more used in Germany, for two reasons. First, the higher presence of large manufacturing multinationals; secondly, the perceived formalism of tax authorities pushes large companies to take care themselves of their purchase invoices, to control the risk of inaccuracies possibly endangering their right to deduction.

In terms of evolution in the use of self-billing, **about two-thirds of the respondents saw no increase, while 30% considered that a 'moderate' increase had taken**

¹³⁰ VAT practitioners in the targeted consultation and business stakeholders in the public consultation.

¹³¹ "Call-off stock is a type of consignment stock where a supplier places goods, such as raw materials, manufacturing components or spare parts, at the premises of a known customer, the premises of a third party or its own premises near the location of the customer, allowing the known customer to withdraw goods from the stock at the moment he needs them. The ownership of the goods is transferred at the moment the goods are withdrawn from the stock." Cf. Deloitte Perspective, Quick fix: call-off stock, 2 November 2017, available at: <https://www2.deloitte.com/nl/nl/pages/tax/articles/call-off-stock.html> (last accessed on October, 2018).

place. The main reasons for the increase in the use of self-billing concern: (i) the diffusion of structured e-invoices, so that more and more large companies, also outside the manufacturing sector, tend to impose it on their suppliers; and (ii) the growth of the digital economy, and, thus, of online services. **The removal of additional requirements for self-billing was mentioned as another factor promoting its uptake, but not as important as the previous ones.** The main reason for that was that these requirements were concentrated in few Member States – seven prior to the SID, and only two to date – so that these gains were not widespread across the EU. Furthermore, also in the countries where simplifications have taken place, as in Poland, they did not result in an increased uptake.

Directive provisions and remaining issues. The functioning of the self-billing rules for domestic transactions was considered as positive by about 80% of the stakeholders interviewed in the targeted consultation. **The assessment is more negative for the use of self-billing in cross-border situations,** which is considered as not working well by about half of the interviewees.

This not-so-positive assessment of the working of cross-border rules remains even though the rules were significantly harmonised, thus pointing out that **certain regulatory divergences still persist.** While additional national requirements were effectively removed, and, furthermore, tacit acceptance of self-billing invoices is no longer required in any Member States, **significant differences still persist with respect to whether the prior agreement must be in writing,** an obligation still in force in 20 countries and removed only in two of them. While the prior agreement is not *per se* considered a significant obstacle by most of the operators concerned¹³², as the self-billing clauses are usually included in the sale contract, it still represents a significant discrepancy between more liberal countries, such as Germany or Austria, and most of the EU.

Business attitude also plays a role in the less-than-ideal convergence of the self-billing rules. For instance, even though, according to Article 219a, the customer's invoicing rules were to apply, and, thus, large German manufacturers would not need to sign any explicit document for self-billing, suppliers resist abandoning the written prior agreement, as they fear they would bear risks in case of audits. However, two points are worth noting. First, this problem is mostly confined to a few large multinationals active in the manufacturing sectors, rather than being widespread. Secondly, although an uneven harmonisation is acknowledged, no significant legal disputes emerged on the cross-border use of self-billing¹³³. Rather, it is the combination of difference in national frameworks and business attitudes together which still create some attrition within the Single Market.

4.4 Archiving provisions

4.4.1 Ongoing complexity and fragmentation: paper invoices

The degree of complexity of archiving provisions for paper invoices is assessed as modest. Over 60% of stakeholders answer that paper-based archiving is 'easy' or 'very easy' to implement, while only a minority of them (approximately 17%) consider

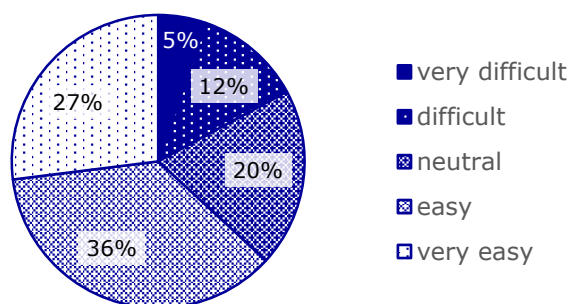
¹³² Cf. Section 6 below.

¹³³ The only legal dispute in this area concerned the translation of the self-billing clause in the German version of Article 226. The term used, *Gutschrift*, was already used in the German VAT legislation to identify credit notes, i.e. a form of amending document. This was eventually clarified by a communication from the German Ministry of Finance, which clarified the matter and also allowed the use of the English term to differentiate the two documents. See: BMF, GZ IV D 2 – S 7280/12/10002, DOK 2013/0956687, of October 25, 2013.

these rules to be 'difficult' or 'very difficult'. These results point to the fact that businesses have probably grown accustomed to longstanding rules on the storage of paper fiscal documents, which are for this reason part and parcel of every company's daily practices. This is further confirmed by the fact that companies of different sizes, ranging from self-employed persons to large corporations with hundreds of employees, express very similar and consistent views.

Across different Member States, the distribution of replies is rather consistent, with only limited differences. For instance, in the Netherlands and Romania, stakeholders consider paper-based storage to be particularly easy, while Polish respondents express a more tepid assessment, especially due to the reportedly too long storage period, even though it is below the EU average. Despite the clarity of well-established rules and practices on traditional paper storage, a few business federations underline some issues that are inherent in physical archives, such as the cost of space rental or the difficulties in retrieving specific pieces of information (e.g. for audit purpose), if not correctly indexed.

Figure 26 – Stakeholders' perception of the ongoing complexity of archiving rules for paper invoices

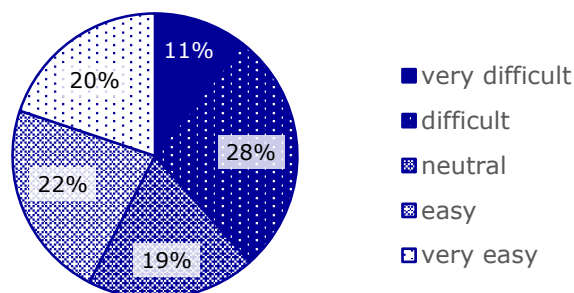


Source: Targeted and public consultation.

4.4.2 Ongoing complexity and fragmentation: e-invoices

National rules on e-invoice archiving are regarded as comparatively less easy to comply with, possibly due to their more recent introduction. Nearly 40% of respondents consider them to be 'difficult' or 'very difficult', which is more than double the corresponding figure for paper invoices. Once again, this result points to the possibility that companies – while quite accustomed to deep-rooted rules on paper-based storage – may still be struggling with recently introduced rules on electronic storage. In particular, large enterprises show the greatest difficulties with these requirements. At the same time, however, it is worth underlining that over 40% of respondents consider e-archiving rules to be 'easy' or 'very easy' to comply with, and nearly 20% have a neutral stance, meaning that almost two thirds of respondents do not encounter issues with the storage of e-invoices.

Figure 27 – Stakeholders’ perception of the ongoing complexity of archiving rules for e-invoices



Source: Targeted and public consultation.

The above overall assessment is the result on largely different opinions across Member States, pointing to the existence of non-uniform national rules within the EU. Indeed, larger shares of stakeholders expressing difficulties with the rules on e-archiving were registered in few countries where stricter requirements have been introduced in recent years, i.e. France, Germany and Italy (as illustrated in Box 10 below). In these three Member States, over half of respondents consider e-archiving to be ‘difficult’ or ‘very difficult’, with peaks of 71% and 78% in Germany and Italy, respectively¹³⁴. In comparison, in all the other Member States – and, especially, in the Netherlands, Portugal, and Romania – the large majority of stakeholders consider e-archiving to be easy or very easy to comply with, sometimes even easier than traditional paper-based storage.

Box 10 – Complex invoices storage requirements in selected Member States

In **France**, while the archiving rules for invoices that are stored in their original format were not flagged by stakeholders as particularly problematic, **requirements on format conversion continue to be considered as particularly onerous**, despite recent amendments that allow the use of scanned PDFs for tax deduction purposes. This is due to a combination of highly detailed requirements with strict fiscal controls. In particular, several cumbersome conditions apply to the conversion of a paper invoice into electronic format, including the obligations (i) to create a copy identical to the original in terms of both the image (even the colours) and the content, and (ii) to explicitly document the procedures to ensure I&A and readability during and after the conversion. Besides, in case of paper invoices converted and stored in PDF format, additional requirements in terms of a certified e-signature and time stamping apply¹³⁵.

As anticipated in the Section 4.2.2, the GoBD – which regulate the storage of electronic documents – are perceived by the majority of **German** stakeholders as a set of particularly burdensome rules. One business association, for instance, underlined that by imposing such onerous requirements, the **GoBD de facto puts into question the equal treatment between paper and e-invoices principle enshrined in the VAT legislation**, and forces SMEs – which do not have the means to set-up a fully-compliant e-archiving system – to stick to paper invoices. In addition to certain stringent rules (e.g. the need to register cash transactions daily and non-cash transactions every 10 days), the GoBD were especially criticized for their scarce clarity on certain aspects. For instance, Article 140 states that, after scanning a paper document, *‘the taxpayer must decide whether documents whose probative value is not preserved when stored in electronic form should also be kept in their original form’*. Leaving such discretionary power to the taxpayer reportedly results in pushing economic operators to keep all fiscal documents in paper form to be on the safe side. Alternatively, certain big companies – that had already invested in the necessary IT system and business procedures for e-archiving – are seeking to obtain a GoBD-compliant certification for their archiving systems. Such a certification, however, would have little value in front of the tax authority, which does not issue such certificate nor does

¹³⁴ A similar negative view is registered also in other Member States – such as Greece and Spain – although, in these cases, a more limited number of replies was collected and findings therefore are to be more carefully taken into consideration

¹³⁵ See the Arrêté du 22 mars 2017 fixant les modalités de numérisation des factures papier en application de l'article L. 102 B du livre des procédures fiscales.

it officially recognize it, and is meant solely for the purpose of strengthening the business procedures surrounding the e-archiving system in case of a tax audit.

In **Italy**, specific regulations apply to the e-archiving of fiscal documents, including invoices¹³⁶. Most of stakeholders consider this **body of legislation to be particularly detailed, if not outright burdensome**. In particular, it was noted that the rules for public archives – which are very strict for accountability reasons – were largely applied to private sector documents. In particular, economic operators intending to manage an e-archiving system are required to (i) adhere to the substantial requirements spelled out in the primary and secondary legislation; (ii) make proof of their procedures in a written document (the so-called *Manuale della Conservazione*, namely 'Guidance to Storing'); and (iii) identify one or more persons responsible for the storing process and its security. As a result, the near totality of companies wishing to archive documents in electronic format outsource to specialised service providers, with the necessary know-how to ensure legal compliance. However, these strict e-archiving rules do not put in question the viability of e-invoicing, since the tax authority clarified that if a taxpayer receives an e-invoice (e.g. a PDF via email), he can either accept the electronic format (thus becoming subject to the e-archiving rules), or reject it by printing the invoice and archiving it in paper¹³⁷.

4.5 Cash accounting for SME promotion

Uptake and Directive Role. Business stakeholders consider the cash accounting scheme as very important, as indicated in Box 11 below. However, the quantitative evidence on its uptake points out that **this regime responds to the needs of a limited number of companies**. Although the uptake of the cash accounting presents some cross-country differences, it remains very limited overall.

As shown in Table 7 below, **in 9 out of the 11 countries in which exact data or reliable estimates could be retrieved from the fieldwork or the targeted consultation, less than 4% of micro enterprises opt for this regime, and, in 7 Member States, the share is below 1%**. Only in Croatia and Germany the cash accounting taxable persons reach a significant share of the eligible micro companies, i.e. 15% and 47%, respectively. The very high share in Germany is most likely due to it being one of only two Member States, with Ireland, in which cash accounting taxable persons can pay VAT upon receiving the payment, but can still deduct VAT upon receiving the invoices. In all other countries, the postponement of the VAT due is matched with the postponement of VAT deduction, as allowed by the newly introduced Article 167a.

The quantitative data are consistent with the qualitative results from the targeted consultation. Local business federations and VAT practitioners evaluate the cash accounting uptake to be very common in Germany, limited in Croatia, and very limited in Hungary, Italy, Poland, Portugal and Spain¹³⁸. Based on the above data and

¹³⁶ See, in particular: (i) *Ministero dell'Economia e delle Finanze, Decreto 17 giugno 2014, Modalità di assolvimento degli obblighi fiscali relativi ai documenti informatici ed alla loro riproduzione su diversi tipi di supporto*; and (ii) *Decreto del Presidente del Consiglio dei Ministri 3 dicembre 2013, Regole tecniche in materia di sistema di conservazione ai sensi degli articoli 20, commi 3 e 5-bis, 23-ter, comma 4, 43, commi 1 e 3, 44, 44-bis e 71, comma 1, del Codice dell'amministrazione digitale di cui al decreto legislativo n. 82 del 2005*.

¹³⁷ In this case, the taxpayer rejects only the invoice's format, while accepting its content. In other words, the clarification, which was explicitly meant to avoid the creation of barriers to the e-invoicing uptake, allows businesses to receive unstructured e-invoices, without having to comply with the e-archiving regulation. On the supplier's side, the situation is less clear-cut. In theory, an invoice sent in electronic form would have to be archived electronically. However, once again an unstructured e-invoice – such a PDF via email – could be considered both as an e-invoice (if an e-signature is added) and as a mere paper invoice transmitted with electronic means (if not e-signed). For this reason, certain taxpayers reportedly send their invoices as unstructured PDFs without e-signature, and when the time to close the accounts comes, they either print them, or add an e-signature and archive them electronically, depending on their preferences (see, Circular 18/E, 24 June 2014, Point 1.5).

¹³⁸ Stakeholders assess the uptake to be limited or very limited also in Cyprus, Estonia, Finland, and Greece. In Romania and Ireland stakeholders assume the uptake to be between moderate and common, and only in Austria one stakeholder rates it as very common.

assumptions of the main drivers and obstacles for the use of cash accounting (as presented below)¹³⁹, the overall uptake at EU level is estimated at about 1.1 million micro enterprises, representing 7% of the total. The results are, however, inflated by the large uptake in the biggest EU country, Germany; considering all other Member States, **the uptake can be estimated at 150,000 micro enterprises, which are about 1% of the eligible population.**

Table 7 – Cash accounting uptake, in selected Member States and EU level, 2017

Member State	# of micro firms applying cash accounting	% over total number of micro firms
Germany	953,006	47.4%
Croatia	19,714	14.7%
Hungary	19,442	3.75%
Poland	15,549	0.96%
Italy	20,000*	0.57%
Spain	14,165	0.56%
Slovenia	1,569	1.19%
Portugal	902	0.11%
Slovak Republic	700	0.16%
Luxembourg	238	0.85%
Bulgaria	141	0.05%
EU	1,106,398*	7%

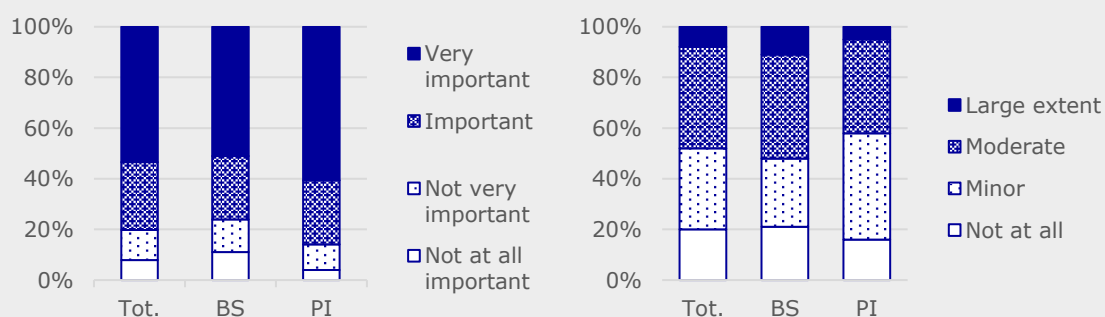
*: estimate.

Source: Authors' elaboration based on targeted consultation, Eurostat, and desk research¹⁴⁰.

Box 11 – Views from the public consultation on cash accounting

Even though the uptake of the cash accounting scheme amongst taxable persons is limited, it is considered as being of high importance by business stakeholders. The development of the uptake over the last five years is seen neutral to positive, with a majority of stakeholders in the public consultation agreeing that a higher number of SMEs benefitted from the cash accounting scheme. Results are summarized in Figure 28 below.

Figure 28 – Importance of cash accounting scheme for businesses (left); increase in the number of SMEs benefiting from cash accounting (right)



Note: BS: Business Stakeholders, PI: Private Individuals

Source: Public Consultation.

The uptake of cash accounting, in absolute terms, has increased thanks to the Directive. After the implementation of the new Article 167a, cash accounting became available in eight additional countries, while in four Member States its scope was increased. **In relative terms, the share of companies opting for it in each Member State is reportedly stable.** A specific case is that of Romania, in which the

¹³⁹ The estimate is based on an OLS regression, where the uptake of cash accounting in the 11 Member States where data is available is considered as a function of three independent variables: (i) the decision to introduce or not the requirement for the customer; (ii) the applicable threshold, expressed in purchase power parity; and (iii) payment duration. Based on the estimated OLS coefficients, the uptake is estimated for the other 11 Member States.

¹⁴⁰ Data provided by tax authorities; for Germany, data from Destatis, for Italy data from a study by Confartigianato.

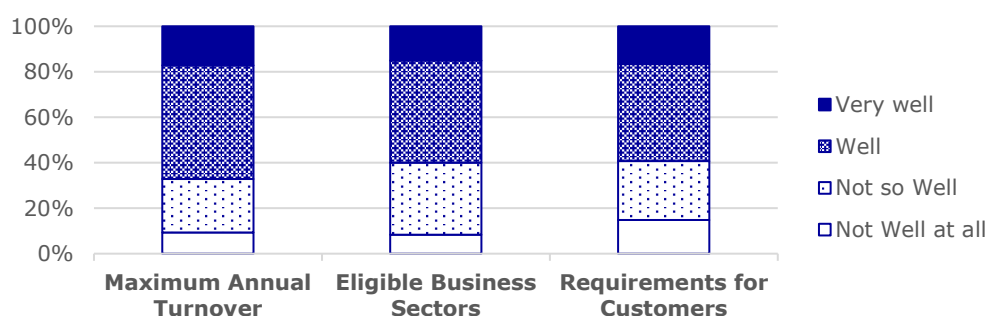
cash accounting system used to be mandatory for eligible companies, and only recently the legislation was amended as to allow taxpayers to opt out.

Several factors limit the cash accounting uptake, which, however, have little to do with the SID provisions; in particular:

- 1) **The additional costs and complexity of the accountancy requirements.** A vast majority of micro enterprises can use the so-called 'simplified accountancy regime', which works on an accrual basis, so that revenues and costs are accounted based on the date of the transactions. When adopting cash accounting, the taxable person needs to work on a cash-basis and monitor payments for VAT purposes. Such a decoupling of the accounting rules and the VAT requirements puts an additional burden on taxable persons, as it might either require additional resources to monitor payments, or a higher fee when their accountancy is outsourced to a tax advisor.
- 2) **The resistance from customers,** which is a factor in the 10 countries where customers of cash accounting taxable persons also have to postpone VAT deduction from the issuance of the invoice to its payment. This creates an additional burden on customers, as they might need to add an additional layer to their bookkeeping, in order to account for and monitor cash accounting invoices. Stakeholders from Member States applying these rules, like Portugal or Poland, report that businesses may show reluctance in dealing with cash accounting taxable persons.

Directive provisions and remaining issues. The quality and functioning of the rules concerning cash accounting are assessed positively by a majority of stakeholders. Among tax authorities, no legal uncertainties regarding the VAT payment and deduction for the cash-accounting taxable persons and their customers are reported, with the exception of Portugal, where it had to be clarified whether the customers could deduct on an invoice- or payment-basis. Business stakeholders evaluate by a majority that the cash accounting rules on the applicable threshold, the eligible business sectors, and the requirements applicable to customers are working well. The requirement for customers attracts the most critical answers, in particular in those Member States, where they also have to postpone VAT deduction. Across those nine countries, around 40% of business stakeholders see this requirement not to work so well or not at all.

Figure 29 – Business stakeholders’ assessment of the working of cash accounting rules

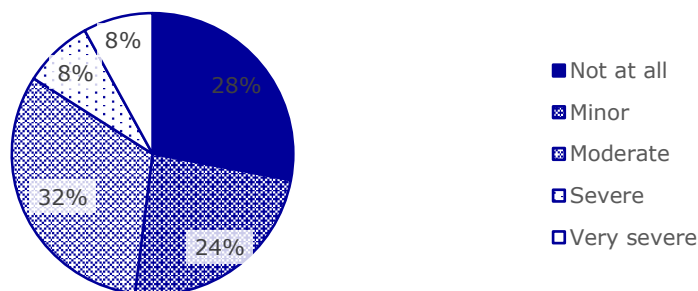


Source: Targeted and public consultation.

Finally, Article 167a was intended to ensure that the use of cash accounting did not affect public finance cash flows. In this respect, **the majority of tax authorities say that the cash accounting regime does not pose severe problems for the public budget.** While the majority of tax authorities say there are no issues at all or only minor issues, around one-third state that there are moderate issues with the cash accounting

scheme creating risks to the stability and predictability of VAT revenues, which may not be adequately tackled by the VAT invoicing rules¹⁴¹.

Figure 30 – Tax authorities’ perception of the severity of issues created by the cash accounting scheme for the stability and predictability of VAT revenues



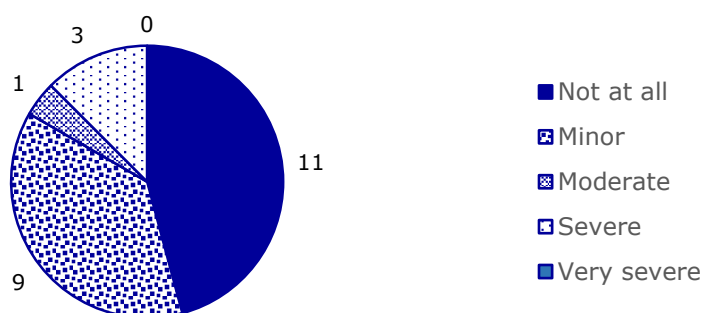
Source: Targeted consultation.

4.6 Tax control

4.6.1 Overall alignment of the Directive with tax control needs

According to national tax authorities, current invoicing rules are well aligned with the needs of tax control activities. Out of 24 respondents, 20 are of the opinion that there are none or only minor issues with ‘VAT invoicing rules not in line with the needs of tax control activities’. At the same time, several authorities suggest that **invoicing rules are far from being the most important factor for tax control.** Rather, in the words of one of them ‘they are part of the mosaic, but not the most important part’. Indeed, the invoice plays an important role in the process of claiming a valid VAT deduction. However, on the one side, having a valid VAT invoice is only one of the elements in proving that the underlying transaction is legitimate and thus gives origin to a right of deduction; on the other side, fraudulent transactions and other forms of tax evasion can be organised by relying on perfectly legitimate and formally correct invoices. **The limited (and declining) importance attributed by tax authorities to invoicing rules also appears from the growing trend in introducing additional, e-reporting requirements** (as illustrated below), enabling more effective and timely controls of the transactions without having to necessarily consider the related invoice¹⁴².

Figure 31 – Tax authorities’ perception of the problems with the alignment of invoicing rules with the needs of tax control activities



Source: Targeted consultation.

¹⁴¹ Only the tax authority of Italy says that there are severe issues with the cash accounting scheme to the stability and predictability of VAT revenues.

¹⁴² See Section 4.7.1.1 and Annex D on the additional requirements.

4.6.2 Relevance of Directive provisions for fighting MTIC frauds

MTIC frauds are specifically targeted by certain provisions introduced by the SID, which mandates a uniform date on which the tax on intra-EU supplies and acquisition of goods becomes chargeable¹⁴³. As the intra-EU supplies and acquisitions of goods now become chargeable at the countries of origin and destination, this revision is also expected to increase the possibility of detecting MTIC and other cross-border frauds, given also the higher likelihood of matching the information submitted by economic operators via recapitulative statements.

However, **the view of tax authorities and VAT practitioners on the working of the new VAT chargeability rules is negative** – actually, the most negative across all SID provisions. More than half of the respondents commented that the new rules on the chargeability of intra-EU supplies and acquisitions of goods, including the specific rules for continuous transactions, do not work well, or not at all. The main explanation provided is that they are not fit to achieve the expected purpose. Indeed, on one side, fraudsters are well versed in complying with formal obligations, including timing and chargeability issues, so that no changes to their behaviours could be expected from these provisions. On the other, acting on chargeability rules rather than improving the real time and electronic reporting of intra-EU transactions could not significantly improve the quality and timeliness of the information put at disposal of the enforcement authorities for fraud identification and prevention¹⁴⁴.

4.7 Emerging needs and issues

4.7.1 Changes of regulatory environment

Since the transposition of the Directive, an increasing number of Member States have introduced new rules, affecting the e-invoicing regulatory framework, mainly through two parallel efforts. On the one hand, tax administrations have been introducing **additional e-reporting requirements** aimed at reducing the tax evasion and gaining more control over VAT revenue sources. On the other hand, EU countries have been promoting the use of **e-invoicing in public procurement**, also in accordance with the Directive 2014/55/EU. The key features of these two trends and their potential to increase the fragmentation of the e-invoicing regulatory framework are discussed here below.

4.7.1.1 Additional e-reporting requirements

In order to increase fiscal revenues, reduce tax evasion, achieve greater efficiency and improve compliance, a growing number of Member States require taxpayers to submit electronic information about the invoices exchanged, such as reports on business transactions, extracts of invoices, declarations of other fiscal data, and VAT records. **Based on the different type of data, these additional reporting requirements to be fulfilled electronically can be grouped into three categories:**

- **Transaction Reporting:** (also known as VAT listings), that is the submission by the economic operator of domestic control statements at regular intervals (e.g. quarterly, yearly), with information on each (or most) of its transactions;

¹⁴³ Articles 64-69.

¹⁴⁴ In particular, as provided in Article 263(2), VAT recapitulative statements may still be sent on paper, and not all Member States require it to be submitted in electronic format; this can hamper the timely and automatic matching of the information so obtained. Cf. VAT Compass, at §11.4.3.

- **SAF-T Reporting:** requiring the provision by the economic operators of additional audit data, fully or partially based on the specifications of the Standard Audit File for Tax (SAF-T) issued by the OECD;
- **Quasi real-time reporting**¹⁴⁵: through which the tax authority is communicated the data of each invoice within a short period of time.

According to the feedback provided by the tax authorities, 12 Member States have such additional requirements in place at the moment. As illustrated in Table 8 below, all but one country introduced their system after or in connection with – in Portugal – the SID. Hence, these requirements entail the risk of having introduced fragmentation not taken into consideration by the Directive. However, in a vast majority of cases the introduction of transaction reporting did not occur from scratch, but was built on an existing VAT listing obligation. Differently, SAF-T and quasi real-time reporting are more recent and largely new measures.

Table 8 – Member States adopting additional requirements, by type and year of introduction

Year of Introduction	Transaction Reporting	SAF-T Reporting	Quasi real-time Reporting
2011	Latvia		
2013		Portugal	
2014	Estonia Slovakia		
2016	Czech Republic Romania	Lithuania Poland	
2017	Italy*		Spain**
2018			Hungary
Existed prior to EU accession	Bulgaria		

Note: * Real-time reporting system for domestic B2B transactions starting in January 2019

** Spain's quasi real-time reporting system only includes companies with an annual turnover over EUR 6 million; below that, the requirements can be categorised as transaction reporting.

Source: Targeted consultation and desk research.

The taxpayers concerned, the data required, and the frequency of reporting vary across Member States and depending on the type of requirements. The frequency naturally depends partly on the type of data, as quasi real-time reporting should be done within a few days of each transaction. Transaction and SAF-T reporting are generally linked to the respective VAT reporting period. The taxpayers covered by the additional reporting requirements are largely determined by the type of transaction. Most countries, like Estonia or Czech Republic, have a threshold, so that reporting requirements apply to all transactions above a certain value, or to all partners with which the value of transactions exceeds a certain value. In other cases, such as in Romania, all operations must be reported, and the requirements have to be fulfilled even by taxable persons which have not carried out any transaction in a given tax period. Additionally, there are diverging rules regarding the geographical scope, with some countries – e.g. Poland – only requiring additional e-reporting for domestic transactions and others – e.g. Latvia – also for intra-EU supplies and purchases. Starting from 2019, Italy will present a special case as the country is introducing real-time reporting for all domestic B2B transactions, while the existing system of transaction reporting will remain in place for intra-EU transactions¹⁴⁶.

The emergence of different e-reporting requirements in some Member States introduced a new layer of regulatory fragmentation. The stakeholders underline

¹⁴⁵ 'Quasi' as they do not require ex ante clearance from the tax authority for issuing the invoice.

¹⁴⁶ A description of the key features of the requirements introduced is provided in Annex D.

that diverging developments in this field are creating a burden for businesses conducting multi-country operations. Furthermore, an additional burden is placed on international providers of e-invoicing solutions, as the data required is often not readily available from the invoice, but remains within the company (usually stored in the ERP system). Thus, these national requirements pose very severe operational challenges to the e-invoicing solutions suppliers, which are a separate vendor category from the suppliers of business-internal processes, such as ERP systems. On the other hand, **additional e-reporting lowers the importance attributed by the tax authorities to the means for ensuring e-invoice I&A**, as they have access to transaction-level data without having to verify the invoice. This is specifically the case in countries with quasi real-time reporting, and, in particular, where the public authorities provide for a free-of-charge e-invoicing software to comply with the requirements, as done in Hungary and Portugal.

4.7.1.2 Mandatory B2G e-invoicing

An increasing number of Member States have been requiring mandatory e-invoicing for supplies rendered to the public administrations. According to the Directive 2014/55/EU, it will be mandatory for all public entities to receive and process e-invoices complying with the European standard (EN 16931) on e-invoice by April 18th, 2019¹⁴⁷. However, many EU countries also imposed the obligation on suppliers. As illustrated in Table 9, based on the information provided by the Connecting Europe Facility¹⁴⁸ and the targeted consultation, B2G e-invoicing has already been made mandatory for both economic operators and national authorities in 13 Member States (although with limitations in some cases). This decision is not necessarily concerned with the fight against VAT fraud or the promotion of e-invoicing. For instance, in Italy, one of the early adopters¹⁴⁹, the main drivers for this move were: (i) to achieve better control of central and, in particular, local public administration expenditures and debt; and (ii) to reduce payment delays by Italian public bodies¹⁵⁰.

Table 9 – Mandatory B2G Invoicing for receiving and submitting

Member State	Year of Introduction	Current Limitations
Finland	2010	
Austria	2014	Supplies to federal authorities
Italy	2014	
Spain	2015	
Slovenia	2015	
Portugal	2016	
Belgium	2017	Region of Flanders
Denmark	2017	
Estonia	2017	
France	2017	Large and medium enterprises
Lithuania	2017	
Netherlands	2017	Supplies to national government / agencies

Source: Targeted consultation and desk research.

¹⁴⁷ With regard to their sub-central contracting authorities and contracting entities, Member States may postpone the application until April 18th 2020, i.e. 30 months after publication of the reference of the hEN.

¹⁴⁸ See <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Situation+per+country>.

¹⁴⁹ It was already foreseen by the 2008 budget law, in Article 1(209-214) (*Legge 244 del 24 dicembre 2007, disposizioni per la formazione del bilancio annuale e pluriennale dello Stato*, as amended by the Legislative Decree 201 of 2011. The system architecture and the specific requirements were then detailed in Decree of the Ministry of the Economy and Finance of 3 April 2013, *Regolamento in materia di emissione, trasmissione e ricevimento della fattura elettronica da applicarsi alle amministrazioni pubbliche ai sensi dell'articolo 1, comma 213, della legge 24 dicembre 2007, numero 244*.

¹⁵⁰ Cf. e.g. Italian Court of Auditors (2014), Annual Report on the Public Finances, Vol. I, at p. 289 and ff; available at: http://www.camera.it/leg17/491?idLegislatura=17&categoria=014&tipologiaDoc=documento&numero=002v01_RS&doc=pdfel (last accessed on October, 2018).

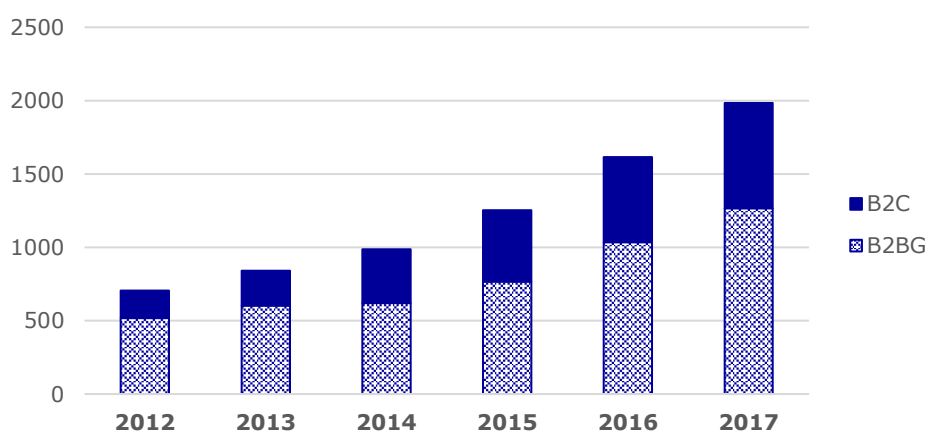
The implementation of e-invoicing in the B2G segment varies across Member States, both in terms of legal requirements and IT architecture, thus increasing regulatory fragmentation and posing severe barriers to international e-invoicing service providers and MNCs. Besides the fact that some of the legislation currently supports national rather than international standards of e-Invoicing¹⁵¹, the fragmentation of national B2G transactions requirements extends to both the structure and the data required (e.g. VAT or tax identification numbers) as well as to e-signature requirements. For instance, in Spain, e-invoices have to be transmitted to the federal government and affiliated institutions in XML format according to *Facturae* model and be signed with an AES based on a digital certificate recognized according to the XAdES standard. However, **many of these technical issues are expected to be addressed soon, as countries will have to adapt their platforms to make them compatible with the recently developed European standard.**

Furthermore, in some Member States, such as Italy, France and Spain, in order to use the national B2G invoicing system, some additional requirements have to be fulfilled (e.g. getting a local VAT number). These non-harmonized legal requirements, often compounded by the fact that the relevant documentation and support is available in the local language only, have been criticized by international service providers and businesses carrying out multi-country operations. The former had reportedly to get a local partner to be able to comply with the B2G requirements of different Member States.

4.7.2 Market and technological evolution

Invoicing rules are reportedly in line with the needs of e-invoicing service providers and do not represent an obstacle to the development of their market, which has largely expanded over the past six years, as confirmed by data provided by the European e-Invoicing Service Providers Association (EESPA). As Figure 32 shows, the volume of structured e-invoices exchanged through EESPA members, which cumulatively account for around 60% of the volume of total structured e-invoices exchanged in Europe, has been continuously growing since 2012 at a rate higher than 20% per year, from 700 million in 2012 to 2 billion in 2017. Cross-border transactions represent a minor, but significant share among those invoices, ranging between 9.5% and 14.5%, on a monthly basis, in the last quarter of 2017.

Figure 32 – Structured e-invoices exchanged via service providers by segment, 2012-2017 (millions of e-invoices)



Source: EESPA data.

¹⁵¹ E.g. TEAPPSXML 2.7.2 and Finvoice 2.01 in Finland, FatturaPA in Italy, Facturae in Spain, and eSlog in Slovenia.

Service providers of e-invoicing solutions positively assess the role of the Directive e-invoicing provisions in enabling a more uniform regulatory framework (*'currently, with a QES you are practically able to operate in all Member States'*) and establishing neutrality between paper- and e-invoices. They generally view the **Directive as sufficiently open to accommodate new technical solutions**. However, **following the adoption of the SID, there has been no emergence of any significant new technologies for ensuring I&A of e-invoices**. The only possible exception could be the blockchain technology, which is being mentioned by service providers; however, reportedly, the application of this technology to e-invoicing is still in its infancy, and no prototypical tool is anytime close to market readiness. The targeted consultation with tax authorities largely confirms these findings. When asked if they accept other means than EDI and e-signature in order to prove I&A, several tax authorities make reference to either BCAT or state generically that they accept any means ensuring I&A, but without naming any examples of other solutions than those mentioned in the Directive. The sole exception is the repeated mentioning of e-seals, as per Regulation 910/2014, by some tax authorities and service providers.

While the provision of domestic e-invoicing services is widely considered by service providers as rather straightforward from a technological and regulatory standpoint, **operating cross-border still remain comparatively more complex** despite the harmonization of the e-invoicing requirements brought about by the Directive. **The main barrier in this field are the additional e-reporting requirements and the national requirements for mandatory B2G e-invoicing** (see sections 4.7.1.1 and 4.7.1.2 above). The service providers underline the technological difficulties for their profession, for example, because the additional transaction data required by some Member States are not normally exchanged between economic operators and their business providers, which may prevent the automation of the reporting duties.

4.8 Summary of findings: Relevance

All the Directive objectives are still relevant, as confirmed by the key stakeholders and by the sheer magnitude of the invoicing process and the issues at stake. The Directive's objectives are invariably reputed as important or very important by all stakeholder groups. As for businesses, this is largely motivated by the fact that invoicing is a key process for all size classes (the estimated average volume of invoices issued on an annual basis ranges from some 340 for micro businesses, to over 140,000 for large firms) and a sizable share of the invoices are issued for intra-EU transactions (about 9%). Besides, late payments, comparatively more heavily affecting SMEs, remain a significant issue in several Member States applying the cash accounting regime, especially in Southern Europe. As for tax authorities, control of VAT fraud was and still is a very significant problem, even though the data on the VAT Gap show wide differences across the Member States. Given the magnitude of the problem, tax authorities want to make sure that invoicing rules remain consistent with the objective of reducing VAT fraud.

Both the prior fragmentation and the complexity of e-invoicing rules across the EU were largely addressed by the Directive, as witnessed by the number of countries adopting a more coherent and liberal approach and the removal of national specific requirements. Thus, **the Directive effectively addressed the needs of economic operators and supported the establishment of a legal framework conducive to an increase of the e-invoicing uptake,** especially by affirming the principle of the equal treatment of paper and e-invoices and the acceptance of e-invoices in PDF format. The technological neutrality principle is also widely appreciated, as it is deemed striking a delicate equilibrium between the flexibility needed by companies to

adapt compliance strategies to their organisation, on one side, and, on the other, the need to provide clear safe harbours to satisfy what appears to be the main concerns of all stakeholders: a reasonable certainty of legal compliance. **The BCAT option is the only provision regarded as cumbersome**, as it remains insufficiently defined at EU level and in most Member States. Still, the problem remains largely theoretical, given the limited level of actual compliance reported by the economic operators, especially by small and micro companies.

The needs for a legal reform harmonising and simplifying the invoicing rules were less pressing compared to the e-invoicing area. Indeed, the Directive interventions are targeted to specific issues, rather than aimed at affirming general principles. **Still, the Directive was fit to address most of the issues tackled, and it evidently led to a general process of simplification and convergence of the invoicing requirements across the Member States**. At the same time, its provisions, in some areas, clashed with the business attitude and the pre-existing legislative differences, so that not all legal changes introduced proved relevant in all EU countries. For instance, the limited and differentiated uptake of some specific invoicing regimes across Member States and sectors (e.g. simplified invoices and self-billing) can be explained by economic, structural, or institutional factors, but also by a degree of business resistance to adopt new or non-standard invoicing rules. Nevertheless, the SID provisions were almost invariably appreciated by relevant stakeholders.

The degree of consistency of the Directive provisions with the needs of SMEs is less clear cut. On the one hand, as illustrated above, **e-invoicing provisions largely mainstreamed an easier e-invoicing solution, especially for micro firms**. On the other hand, **the uptake of simplified invoices, and, even more importantly, of the cash accounting regime remained limited**. The share of micro firms opting for the latter regime remains marginal across the EU (with the exclusion of Germany), and has been estimated at about 1% of the eligible companies. Again, the limited attractiveness of this regime is not due the rules in place, which are considered fitting the needs of SMEs and public authorities.

The relevance of the Directive for tax control activities deserves a more complex judgment. **Tax authorities deem the Directive provisions aligned with their needs, even though invoicing rules do not play a major role in the fight against tax evasion**. Even though the invoice is the key document for claiming VAT deduction, and tax authorities want to make sure that a substantially and formally correct invoice is issued for each transaction, at the same time, the invoicing requirements amended by the Directive or the new rules of VAT chargeability have not tilted the balance against domestic or cross-border fraudsters. This is also testified, *a contrario*, by the growing importance of additional e-reporting requirements, through which VAT transactions are controlled granularly, even without having to check the underlying invoice.

In terms of the evolution of the needs, and of how such evolution may affect the ongoing relevance of the Directive, two regulatory trends have emerged since its adoption. First, **the introduction of additional e-reporting requirements** at national level to fight against tax evasion. While the situation is still rapidly changing, it risks eating up part of the harmonization gains achieved by the Directive. Similarly, the increasing number of Member States requiring **mandatory use of e-invoicing for B2G transactions** could affect the regulatory framework for e-invoicing introduced by the Directive, again risking re-introducing certain barriers to cross-border operators. Differently, **the review of technological advances in the realm of e-invoicing does not point to any significant change** that could affect the ongoing relevance of the Directive.

5 EFFECTIVENESS

This Section presents the assessment of whether and the extent to which the Directive has achieved its objectives, by causing its expected outcomes and impacts. First, in Section 5.1, the **e-invoicing uptake** is analysed, describing its trends since 2014 and measuring quantitatively the additional uptake that can be attributed to the Directive. Increasing the e-invoicing uptake is not only one of the outcomes that should result from the Directive, but also a cause of several of the following impacts.

The analysis then proceeds by measuring the Directive contribution to:

- 1) The **reduction of administrative burdens on businesses** (in Section 5.2), which draws heavily on the detailed quantification reported in Section 6;
- 2) The improvement to the **functioning of the Single Market** (in Section 5.3);
- 3) The **support for SMEs** (in Section 5.4);
- 4) The effectiveness of **tax control activities** (in Section 5.5).

5.1 e-Invoicing uptake

5.1.1 Trends in e-invoicing uptake in EU

5.1.1.1 Trends in the share of companies issuing or receiving e-invoices

One of the main outcomes to be achieved by the Directive is to increase the uptake of e-invoicing, by providing simpler, clearer and more uniform legal requirements. The analysis of the trend in the use of e-invoices by European firms has been carried out based on (i) data from the **Eurostat 'ICT usage in enterprises' survey**, and (ii) the results of the **business survey**, complemented with the information gathered from the **targeted consultation of economic operators** (for more information, see Box 12). Additionally, whenever possible, the resulting estimates were triangulated and cross-checked based on EU and national secondary sources, and the findings from other participants in the targeted consultation.

The trends in the share of companies issuing or receiving e-invoices have been analysed, first, separately for **structured and unstructured e-invoices**, and, then, for e-invoices in general. For each electronic format, the uptake in 2014 and 2017 is presented, together with the estimated annual growth, per size class. **The year 2014 was considered as the baseline year for the Directive**, taking into account that the Directive had to be implemented by 1 January 2013, and considering 2013 as a transition year in which economic operators became aware of the new rules and adapted their business processes.

Box 12 – Assessing the e-invoicing uptake in EU: data sources and limitations

The data from **Eurostat** have been carefully examined, focusing on the historical evolution of results since 2011, when the current module on e-invoicing was first introduced. Notably, the ICT usage in enterprise survey was amended in 2014, by introducing a new set of questions and addressing pre-existing issues related to cross-country differences in the interpretation of e-invoicing, which, compounded by the different national definitions, had reduced data comparability¹⁵². Currently, Eurostat data distinguishes between two types of e-

¹⁵² Questions on the format of e-invoices inherently place a high cognitive burden on the interviewees, whose capacity of clearly distinguishing between the structured or unstructured form of the e-invoice issued or received is not always established. On the one hand, businesses risk to mistakenly consider as a structured e-invoice any document undergoing some form of automation (e.g. via scanning and Optical Character Recognition), even if it does not provide full integration. On the other hand, businesses may not be fully aware of whether their e-invoice is issued in a structured or unstructured file form, for instance, when they manually

invoices, namely: (i) structured e-invoices, suitable for automated processing (e.g. EDI, UBL, XML), and (ii) unstructured e-invoices, not suitable for automated processing (e.g. e-mail, e-mail attachment PDF, TIF, JPEG). **Key limitations** with reference to the Eurostat data concerns: (i) gaps in time series of national data for the period of analysis (i.e. 2014 and 2017), (ii) the coverage only of companies with more than 10 employees, i.e. small, medium, and large enterprises, thus lacking data on micro firms, and (iii) the lack of information on the volumes of invoices issued/received electronically¹⁵³.

The **business survey** results have been used to complement the Eurostat data, and, as much as possible, fill the above identified last two gaps, i.e. to provide estimates on micro firms and the volume of e-invoices. To this end, the sample of the business survey was adjusted to maximize the comparability with Eurostat dataset, i.e. by excluding firms active in the financial, health, and education sectors, which are not covered by the Eurostat enterprise survey. Still, it is worth stressing that **the accuracy and reliability of the estimates based on the business survey are inevitably lower than Eurostat data**, due to: (i) the lower sample size; (ii) the different approach taken to gather data on e-invoicing uptake over time: Eurostat measures the occurrence of the event in a given year, while the business survey inquired the situation in the current year and then asked when the firm started to exchange e-invoices, a piece of information which faces recalling memory issues, and (iii) the on-line-based survey recruitment and participation modalities, which introduces a sampling bias. To correct for the latter bias, data have been adjusted by deducting the share of firms without IT access¹⁵⁴. Nonetheless, an overrepresentation of sophisticated business segments, more prone to the use of e-invoices, is likely to be present, thus entailing a certain overestimation of the uptake.

Structured e-invoices. An e-invoice presented in an electronic format which allows for its automatic and electronic processing is referred to as a 'structured e-invoice'. This structured data file can be transmitted directly from the supplier's system to the buyer's system, without human intervention. The data could be transported through (i) a closed, point-to-point channel (EDI), which connects the supplier directly to the buyer, (ii) an open e-invoicing network that connects many suppliers to many buyers, or (iii) a supplier portal.

In 2014, according to Eurostat data, 29% EU companies with more than 10 employees issued or received structured e-invoices. This value results from significant differences in the business uptake across both Member States (going from as low as 8% in Cyprus up to 67% in Denmark) and firm size classes, with large enterprises recording an e-invoicing uptake more than 20% higher than small enterprises.

As anticipated above, except for 2016, the Eurostat time series have gaps for several countries¹⁵⁵. Bearing in mind these limitations, the annual change in the share of businesses with more than 10 employees exchanging structured e-invoices during the 2014-2017 period was computed for all but three Member States¹⁵⁶, based on the available data. National estimates have then been aggregated to estimate the overall change at EU level, using the national business population, weighted by the distribution of companies per firm size (small, medium and large)¹⁵⁷. The results, shown in Table 10 below, indicate **an estimated annual increase of 4.1 percentage points (p.p.) between 2014 and 2017. Thus, in 2017, the share of firms with more than 10 employees issuing/receiving structured e-invoices has been estimated at**

create the e-invoice into a supplier portal, which, in turn, transforms it into a structured e-invoice. To address these issues, Eurostat frequently changed the formulation of the questions and/or the structure of the relevant survey module, to make as clearer as possible what is meant by 'invoices' and 'e-invoices' and the difference between structured and unstructured e-invoices.

¹⁵³ The model questionnaire gathers information only on the share of the types of invoices issued/sent out of all invoices, not the absolute values. The results are aggregated in terms of percentage of enterprises that e.g. sent e-invoices B2BG, suitable for automated processing – more than 10% of all invoices.

¹⁵⁴ Eurostat: Digital economy and society statistics.

¹⁵⁵ The number of Member States covered by Eurostat is 22, 19, and 13 in 2014, 2015 and 2017, respectively.

¹⁵⁶ France and Finland had to be excluded by the analysis as only one observation was available between 2014 and 2017, while, in the case of UK, available data for years 2014 and 2016 indicate a significant reduction (-13 p.p.), which looks hardly justifiable and in contradiction with the positive trend recorded by all other Member States.

¹⁵⁷ Source: Eurostat Structural Business Statistics.

41%, at EU level. The rate of growth is broadly similar among firm's classes, leaving unvaried the gap between small, medium, and large firms.

Table 10 – Share of businesses with more than 10 employees issuing/receiving structured e-invoices in the EU (2014-2017)

Business size	Share of firms (2014)	Annual change in the share of firms (p.p.)	Estimated share of firms (2017)
Small	27%	+4.0	39%
Medium	35%	+4.2	48%
Large	49%	+4.4	62%
All	29%	+4.1	41%

Source: Authors' elaboration on Eurostat data.

Data from the business survey have been used to estimate the trend of the share of micro firms using structured e-invoices. The data displayed in Table 11 below show a general increase in the use of structured e-invoices in all Member States covered, starting from a very low uptake, not exceeding 7% in 2014. Between 2014 and 2017, the share of businesses exchanging structured e-invoices recorded an annual increment falling in the +3 / + 4 p.p. range in most of the covered Member States. A comparatively higher annual increase in the use of the structured e-invoices by micro firms was detected in Italy and Spain, i.e. +5.9 and +7.9 p.p., on average, respectively. In both cases, a jump in the trend is detected between 2016 and 2017, where the rate of growth almost doubled. Such a result can be primarily explained by the national initiatives mandating the issuance of structured e-invoices for B2G transactions since 2014/2015, and by the availability of centralised portals set up by the government to exchange B2G invoices¹⁵⁸. Overall, the annual increment in the sample has been estimated at +4.9 p.p. between 2014 and 2017. However, as indicated above, these figures are likely to somehow overestimate the phenomenon. Besides, the inclusion of Spain and Italy is likely to further increase this measurement bias. Once these two countries are removed, the annual increment is reduced to +3.6 p.p., a value slightly below the value for firms with more than 10 employees, and regarded as more reliable. As a result, **the estimated adoption rate of structured e-invoicing among micro firms in the EU has been estimated to have grown threefold, from 4.5% to 15% between 2014 and 2017.** Hence, the uptake of structured e-invoices across micro companies remain limited, at least in countries where B2G structured e-invoicing is not mandatory. Though growing, there has been no acceleration compared to larger companies, so that the uptake remained significantly lower than the other size classes.

Table 11 – Share of micro businesses exchanging structured e-invoices (2014-2017)

Member State	Share of firms		Annual change in the share of firms (p.p.)
	2014	2017	2014-2017
France	5%	18%	+4.3
Germany	2%	9%	+2.4
Italy	7%	25%	+5.9
Netherlands	6%	14%	+2.6
Poland	6%	18%	+4.0
Romania	1%	12%	+3.6
Spain	7%	31%	+7.9
Sweden	3%	18%	+5.4
Weighted average	6%	20%	+4.9
Weighted average, without Italy and Spain	4.5%	15.4%	+3.6

Source: Authors' elaboration on business survey data.

¹⁵⁸ For more details, cf. section 5.1.2 on drivers and obstacles below.

Unstructured e-invoices. An e-invoice presented in a format other than structured, which does not permit automated electronic processing, is considered as an 'unstructured' e-invoice. These types of e-invoices are commonly exchanged as PDF files attached to an email.

The Eurostat data on the '*share of enterprises sending e-invoices for B2B and B2G transactions not suitable for automated processing*' have been analysed to assess the trend in the business uptake of unstructured e-invoicing since 2014. The same measurement approach illustrated above was adopted, based on the computation of the annual increment during the 2014-2017 period for all Member States based on the available data. Thus, the analysis was affected by similar, albeit somewhat smaller, limitations¹⁵⁹. As illustrated in Table 12, it has been estimated that, **between 2014 and 2017, the share of companies with more than 10 employees issuing B2B and B2G unstructured invoices grew by about 5.9 p.p. on annual basis.** Thus, in 2017, the share of EU firms with more than 10 employees issuing B2BG unstructured e-invoices was of 58%.

Table 12 – Share of businesses with more than 10 employees issuing unstructured e-invoices B2BG in the EU (2014 - 2017)

Business size	Share of firms (2014)	Annual change in the share of firms (p.p.)	Estimated share of firms (2017)
Small	39%	+5.9	57%
Medium	45%	+6.5	65%
Large	51%	+5.5	67%
All	40%	+5.9	58%

Source: Authors' elaboration on Eurostat data.

As far as micro firms are concerned, the uptake of structured e-invoicing has been estimated based on the results of the business survey. According to this source, **since 2014, the rate of adoption increased by 8.5 p.p. per year, on average, leading to a doubling of the share of micro firms issuing or receiving unstructured e-invoices by 2017 (from 25% to 51%).** This annual increment looks comparable to the one estimated by Eurostat for firms above 10 employees reported above. The comparatively faster pace of growth estimated for micro firms is likely to be explained by the broader scope of the population covered by the business survey, which also includes B2C transactions and consider both the active and the passive invoicing cycle, and is consistent with the evidence provided by stakeholders, suggesting a faster uptake among micro firms in recent years. Thus, also taking into account the more limited distortion introduced by the B2G requirements in Italy and Spain, the estimated trend has been considered adequate, without further adjustments.

Table 13 – Share of micro businesses exchanging unstructured e-invoices (2014-2017)

Member State	Share of firms		Annual change in the share of firms (p.p.)
	2014	2017	2014-2017
France	25%	47%	+7.3
Germany	26%	50%	+8
Italy	25%	52%	+9
Netherlands	32%	56%	+8
Poland	27%	46%	+6.3
Romania	20%	46%	+8.7
Spain	21%	55%	+11.3
Sweden	23%	45%	+7.3
Weighted Average	25%	51%	+8.5

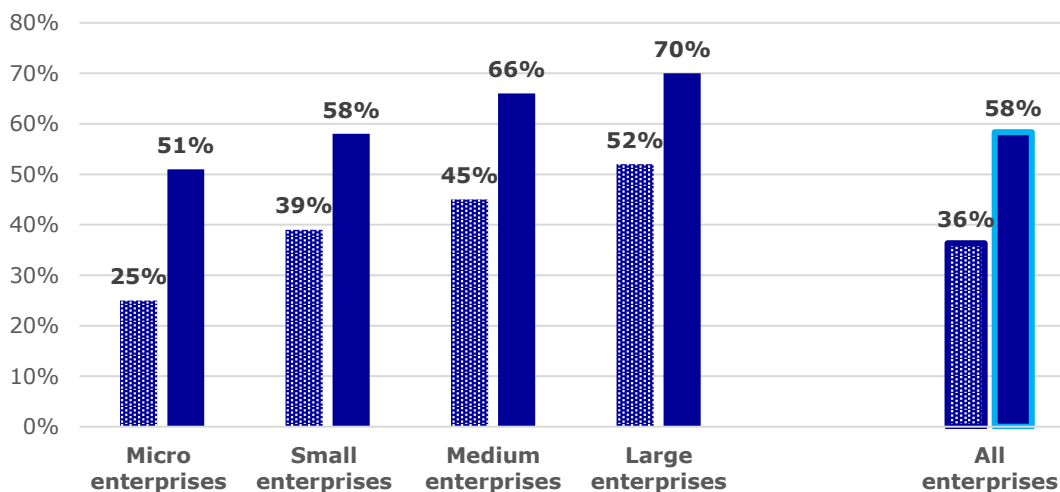
Source: Authors' elaboration on business survey data.

¹⁵⁹ In 2017, data are available for 15 Member States (instead of 13 for structured) and UK data are coherent, thus allowing its inclusion in the analysis.

e-Invoice uptake. The estimated shares of firms exchanging structured and unstructured e-invoices should not be regarded as additional, as most of companies, except for micro firms, deal with more than one format. Accordingly, to estimate the overall invoicing uptake, the share of companies issuing only structured, only unstructured, or both forms of e-invoice need to be considered¹⁶⁰. As the share of firms exchanging only structured e-invoices in 2017 is marginal, going from about 1% of micro companies to 4% of large ones, **the overall e-invoice uptake (shown in Figure 33 below) comes very close to the estimates for the uptake of unstructured e-invoicing.**

Overall, in 2017, about three fifths of EU companies used an e-invoice technology. Since 2014, when about one third of EU companies had exchanged e-invoices¹⁶¹, **this share has increased by slightly more than 7 p.p. per year.** The growth in the uptake is apparent across all size classes, being higher for micro companies (albeit from a lower basis), where it is of almost 9 p.p. per year.

Figure 33 – Share of businesses issuing/receiving e-invoices in the EU (2014 - 2017)

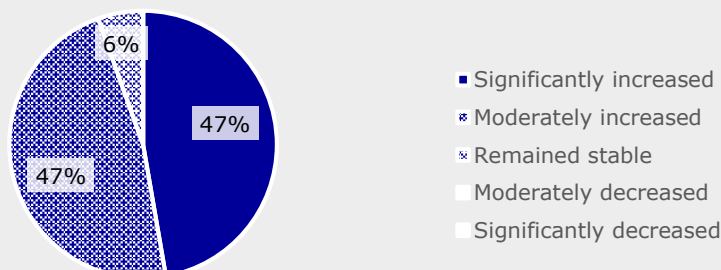


Source: Authors' elaboration on Eurostat and business survey data.

Box 13 – Qualitative findings on the trends in the uptake of e-invoicing

The near totality of the participants to the targeted consultation consider that e-invoicing has become more and more widespread over the last five years, equally split between those deeming the growth 'moderate' and 'significant' (Figure 34). The growth is perceived to affect both the structured and unstructured formats, as well as those exchanged via service providers.

Figure 34 – Stakeholders' perception on e-invoicing uptake over the past five years



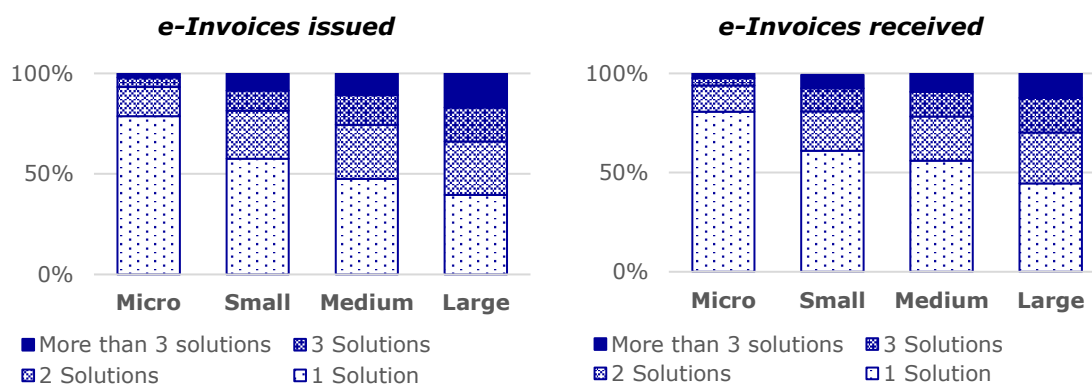
Source: Targeted consultation.

¹⁶⁰ Business survey data, re-based to ensure consistency with the uptake estimates from Eurostat.

¹⁶¹ No data for 2014 exist on the share of companies using either or both structured or unstructured e-invoicing; hence, to calculate the overall e-invoice uptake, the 2017 share of firms exchanging only structured e-invoices has been used.

e-Invoicing solutions. A more granular analysis of different forms and channels used by firms to exchange e-invoices has been carried out based on the data from the business survey. Consistently with the above, **larger businesses use different channels to deal with different trading partners.** As shown in Figure 35 below, the number of e-invoicing solutions increases together with the business size: while a vast majority of micro companies (approximately 80%) use just one solution to issue and receive e-invoices, over half of large enterprises uses two or more methods. Notably, 17% of large firms stated that they issue e-invoices using more than three different solutions. In between, a tiny majority of small and medium enterprises usually make use of just one solution, although the shares of companies using two or more solutions is significant, ranging from 40% to 52%.

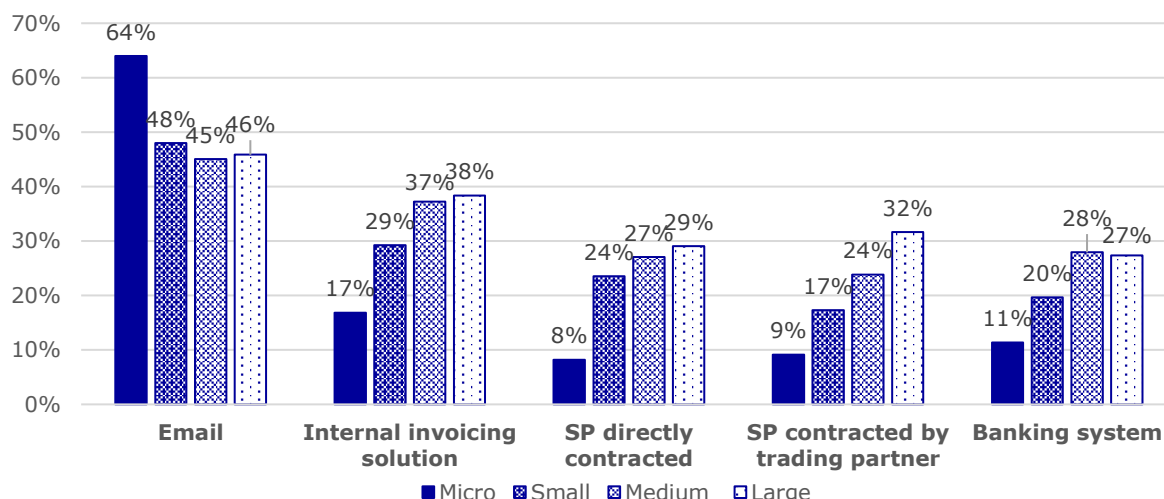
Figure 35 – Share of businesses by number of e-invoicing solutions used (2017)



Source: Authors' elaboration on business survey data.

Coherently with the above results, highlighting a prevalence of unstructured e-invoices over structured ones, **the most common invoicing solution across all firm size consists in e-invoices sent via e-mail, usually in PDF format.** Unsurprisingly, this simple invoicing solution is especially common among micro firms (64% of those issuing e-invoices), but its use is also reported by a sizable share (45% - 48%) of small, medium, and large firms. Secondly, **an important share of the medium and large businesses (37% - 38%) uses an e-invoicing solution internally hosted and managed (purchased from a software provider or designed in-house).** The share of firms using a similar, more sophisticated, e-invoicing solution is reduced to 29% in case of small firms, and 17% among micro companies. The complexity and the resulting degree of automation of such a solution varies across size classes. Third, firms of all sizes exchange e-invoices through a variety of online service providers, who may be contracted both by the business itself or by its trading partners. **The reliance on online service providers increases with the size of the firm,** being used by about one third of large companies and one fourth of medium firms, while a tiny minority of micro firms (8-9%) use e-invoicing service providers. Across all size classes, except for micro, service providers offering automated data processing, i.e. issuing or receiving invoices without any manual intervention on the firm's side, are slightly more common (+5 to +10 p.p.), compared to those requiring firms to manually input the relevant invoice data in a web portal. Finally, the reliance on an electronic banking system for issuing e-invoices features a broadly similar trend across size classes.

Figure 36 – Share of businesses issuing e-invoices by solutions used (2017, EU)



Note: SP: Service Providers.

Source: Authors' elaboration on business survey data.

e-Invoices volume. The overall volume of e-invoices exchanged in Europe has been estimated based on: (i) the share of firms exchanging e-invoices; (ii) the share of e-invoices over the total number of invoices, per size class; and (iii) the total volume of invoices exchanged in the EU in 2017, again per size class. These estimates have been calculated based on business survey data, since neither Eurostat no other databases include this kind of information.

In the case of firms exchanging e-invoices, **the share of e-invoices out of the total amount of invoices issued/received varies only limitedly across size classes, and hovers around or slightly above 50%**¹⁶², with a somewhat higher incidence for large firms. Consistently with above analysis, more marked differences across size classes were detected in terms of the e-invoice format, with the unstructured form accounting for 95% of all e-invoices issued by micro firms, a share shrinking as the firm size progresses. A largely similar situation characterizes the invoices received, even though the share grows more markedly with the firm's size.

Table 14 – Share of e-invoices issued and received (2017)

Business size	Share of e-invoices issued			Share of e-invoices received		
	Total	Structured	Unstructured	Total	Structured	Unstructured
Micro	50%	3%	47%	44%	2%	42%
Small	50%	14%	36%	46%	12%	34%
Medium	50%	20%	30%	50%	20%	30%
Large	58%	34%	24%	56%	31%	25%

Source: Authors' elaboration on business survey data.

The limited evidence available from secondary sources looks coherent with the above results. According to the Belgian *Agence pour la Simplification Administrative* (ASA), in 2015, the share of B2B e-invoices issued through a digital platform and a web portal stood at 9% and 12%, respectively, while a higher share (31.2%) was sent as PDF via email, giving a total of 52% of e-invoices (structured and unstructured)¹⁶³. Billentis (2017) reports that, according to recent surveys in Austria, Estonia, Germany and Spain,

¹⁶² The share of structured and unstructured e-invoices of the total amount of invoices issued and received in 2017 is estimated based on the data from the business survey.

¹⁶³ Since 2013, ASA conducts a yearly enterprise survey collecting quantitative data, among others, on the volume and the methods of transmission of invoices (for more information, see ASA Report 2014-2016).

in 2015 unstructured (PDF) invoices represented around three quarters of all e-invoices, an estimate somewhat higher than that shown in Table 14 above.

Table 15 below provides an estimate of the **volume of e-invoices exchanged in Europe**, both in total and per format, and per each firm size class. It results from the multiplication of the estimated share of e-invoices (in Table 14), the share of firms exchanging e-invoices (as estimated above), and the total number of invoices reported in Section 4.1.1.

Table 15 – Volumes of e-invoices issued in the EU, (2017, in million)

Business size	Volume of e-invoices	of which structured	of which unstructured
Micro	976.3	49.3	927.0
Small	725.4	202.4	523.0
Medium	655.1	265.2	389.9
Large	2,640.5	1,528.7	1,111.8
Total	4,997.2	2,045.6	2,951.6

Source: Authors' elaboration on business survey data.

The estimated amount of structured e-invoices – i.e. 2.05 billion – is largely coherent with the findings of the recently completed EESPA survey. The amount of structured e-invoices delivered by EESPA members in 2017 was estimated at over 1.9 billion, of which about 1.26 billion for B2B and B2G transactions and 720 million for B2C transactions¹⁶⁴. Considering that the focus of the business survey was on firms active in the B2B and B2G segments, the data described above adequately fit with those provided by EESPA members, which cumulatively account for about 60% of the volume of structured e-invoices exchanged in Europe. **No comparable estimates exist on the number of unstructured e-invoices.**

5.1.2 Drivers and obstacles

5.1.2.1 Drivers

According to the majority of the business stakeholders participating in the targeted (65%) and public (91%) consultations, **the most important driver for the uptake of e-invoicing is the demand from business partners in the value chain**, i.e. suppliers and, most importantly, customers. This was, indeed, confirmed by the fieldwork, where both experts and service providers identified **the push from trading partners as the main reason why the business population at large, and, in particular, micro and small companies have been adopting e-invoicing over the last five years**. Secondly, when it comes to the use of structured invoices in the B2B segment, the fact that a large multinational moves to an automated system and requires all its trading partners to adopt it is *de facto* the only reason for its adoption.

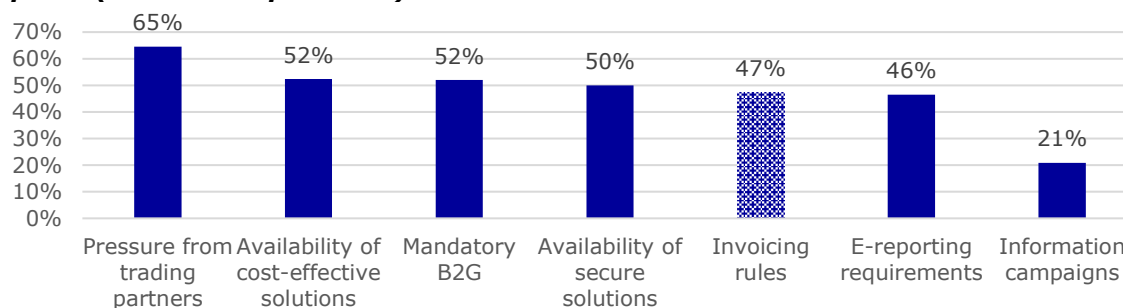
The other very important, albeit geographically concentrated, driver for the adoption of e-invoicing is the **mandatory B2G e-invoicing requirements**. While it obviously plays no role in the Member States in which it is not yet in force, thus does not score very well if the whole responses are considered, it is invariably mentioned as a major driver in the countries (e.g. Italy) or market segments (e.g. medium and large companies in France) concerned, and by all the e-invoicing service providers interviewed. Together with the push from large customers, it is the only real driver of the diffusion of structured invoicing, as already shown by the uptake at national level described above.

¹⁶⁴ EESPA, News Release, 17 September 2018.

Furthermore, by popularising e-invoicing, this is also considered also as a driver – albeit of a lower importance – in the uptake of unstructured invoices among micro companies.

On the low-end of the spectrum, **information campaigns are considered as a significant driver only by 21% of the participants** to the targeted consultation, while additional reporting requirements, specifically, and **invoicing rules**, in general, **are deemed to have played a moderate or major role by less than half of the respondents**. Figure 37 below show the full results for the targeted consultation¹⁶⁵.

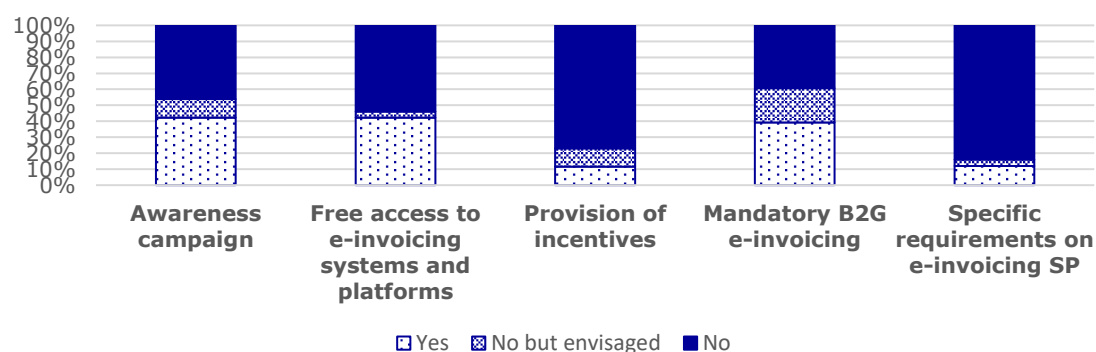
Figure 37 – Stakeholders’ perception on moderate and major drivers of e-invoicing uptake (share of respondents)



Source: Targeted consultation.

Despite their comparatively lower effectiveness to promote e-invoicing uptake, according to business stakeholders, information campaigns¹⁶⁶ are one of the policy measure most commonly adopted by tax authorities¹⁶⁷. Other most common actions include free access to e-invoicing systems or platforms¹⁶⁸ (11 out of 26 for both measures) and mandatory B2G requirements (11 out of 28, and six more having adopted a legislation soon-to-be in force). For all these measures, the effectiveness in promoting e-invoicing uptake is perceived as ‘low’ or ‘very low’ by many, or most, of their adopters.

Figure 38 – Share of Member States adopting policy measures to promote e-invoice uptake



Source: Targeted consultation and desk research.

¹⁶⁵ Public consultation data are shown in Annex B.

¹⁶⁶ More in details, web platforms and online communication were used in all the Member States concerned; four Member States also mentioned other specific channels, such as roadshows, conferences, dedicated forums.

¹⁶⁷ TAs were asked to provide information on whether they have actively intervened in promoting e-invoicing uptake by (i) awareness campaign; (ii) granting free access to e-invoicing systems and platforms; (iii) providing economic incentive for the adopters of e-invoicing technologies; (iv) making e-invoicing mandatory for B2G transactions; or (v) introducing specific requirements for service providers.

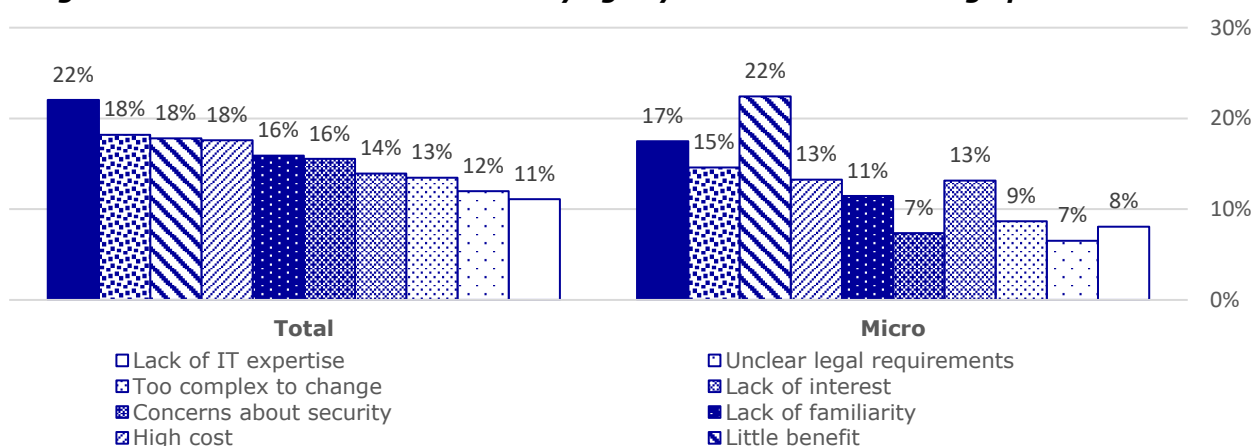
¹⁶⁸ Few Member States provide for a system through which companies can issue e-invoices free-of-charge. The access may be limited to B2G invoices (e.g. in Denmark) or targeted to micro companies (as in Slovenia, where maximum 5 invoices per month can be issued on the free public platform).

5.1.2.2 Obstacles

In order to identify the key barriers to the uptake of e-invoicing, businesses were requested to choose from a list of ten possible obstacles¹⁶⁹. **A moderate number of companies, about one quarter of the overall sample, identified no barriers to the use of e-invoicing. Such a share is higher among micro companies.** Indeed, the share hovers between 15% and 20% for companies with more than 10 employees, while it reaches almost 30% for micro companies. However, this seemingly counterintuitive finding is actually consistent with the evidence emerging from the fieldwork. First and foremost, micro companies are disproportionately likely to use simpler, unstructured technologies, and, in particular, PDFs, for which legal barriers and business resistance have been almost fully overcome over the last five years. Secondly, the compliance rate with certain requirements, including BCAT and e-archiving rules, is reportedly lower among micro companies, and, so far.

Considering the most often mentioned barriers, **supply-chain partners and customers unwilling to exchange e-invoices** and **using e-invoicing solutions with divergent formats** were the two most common hindering factors (22% and 18%, respectively). At almost the same level, **cost-effectiveness considerations come into play**, since 18% of the respondents consider e-invoicing as generating too little benefits or too high costs. As already discussed, legal requirements are the second-least important hindering factors, mentioned by 12% of the sample, just above the lack of expertise. **Focusing on micro companies, the most important barrier is the perceived lack of benefits (22%)**, while the limited interest of the trading partners is relatively less important (17%). Finally, **one-off adaptation efforts as well as legal and security concerns are relatively more relevant for larger firms**, due to the higher complexity of the business structure and processes. This confirms several findings presented so far and further discussed in the efficiency sector, and in particular: (i) that business attitude (or resistance) to change plays a major role in determining the invoicing behaviour of companies, and, thus, the success or failure of certain reforms; (ii) that micro companies fail to see large benefits from the adoption of e-invoicing; and that (iii) more 'complex' barriers, such as safety and compliance concerns, are more of an issue for larger organisations than for smaller ones.

Figure 39 – Share of businesses identifying key barriers to e-invoicing uptake



Note: 'Other' answer not included (it attracted between 0 and 1% of responses).

Source: Business survey.

¹⁶⁹ Namely: (i) lack of interest in and/or familiarity with e-invoicing; (ii) limited benefits from e-invoicing; (iii) high investment operating costs of existing e-invoicing solutions; (iv) complexity of necessary process change; (v) lack of IT expertise; (vi) concerns over data security; (vii) divergent/incompatible e-invoicing requirements of trading partners; (viii) trading partners not interested in using e-invoicing; (ix) unclear legal requirements; and (x) other.

Concerning the **geographical distribution of the barriers**, Table 16 below shows the top three obstacles in each Member State. The lack of interest of trading partners is among the main barriers in all of them, except for the Netherlands. Then, incompatibility, limited benefits, and excessive costs are mentioned in four Member States each. In Sweden, where e-invoicing requirements were already liberal prior to the SID, and the Netherlands, where requirements were first relaxed in 2009, cost-effectiveness considerations play a more significant role. **The only obstacle which is nowhere a top-three priority is the lack of clear legal requirements.**

Table 16 – Share of businesses mentioning a specific barrier, by Member State

%	FR	DE	IT	NL	PL	RO	ES	SE	Tot
Trading partners not interested									7
Incompatible with trading partners									4
Little benefits									4
High Costs									4
Lack of familiarity									1
Concerns about security									2
Lack of interest									1
Too complex to change									1
Lack of IT expertise									1
Unclear legal requirements									0

Source: Authors' elaboration based on business survey.

Results from the targeted consultation largely confirm those of the business survey. The **lack of interest from suppliers and customers is mentioned as a hindering factor by more than 50% of the economic operators** which identified at least an obstacle, while the lack of compatibility comes third, quoted by more than a quarter of respondents. The second most relevant hindering factor is the lack of familiarity with e-invoicing technologies which, mentioned by about one third of the participants, is relatively more prominent compared to the business survey.

Focusing on e-invoicing service providers, most of them mention the **lack of familiarity of economic operators** as the most significant obstacle, followed by the complex organisation changes that introducing e-invoicing may require, and the limited benefits for most of the companies. To the contrary, they hardly perceive their potential customers as lacking the required IT expertise, or that the costs are too high, since they would compare favourably with the internal invoicing costs for a typical company.

5.1.3 Attribution

The extent to which the Directive has increased e-invoicing uptake in the EU has been analysed based on two sets of evidence:

- 1) First, the **qualitative evidence** from the fieldwork – both the stakeholders' assessment and the legal analysis – allowed identifying whether a role was played by the Directive, and for which format of e-invoices and categories of stakeholders. This also provided a rough indication of the relative magnitude of the effects;
- 2) Secondly, the **quantitative evidence** from the analysis of the uptake trends in the Member States in which the SID affected invoicing rules to a different extent provided indications to measure the attribution factor.

5.1.3.1 Qualitative evidence

First, the analysis of e-invoicing drivers carried out above neatly pointed out that **other factors, such as the demand from trading partners and the B2G requirements**,

played a more important role than the Directive. Legal requirements are neither the main cause for e-invoicing uptake, nor the most problematic hindering factor; rather, their importance scores relatively poor in both respects. Furthermore, on the one side, among legal requirements, other adjacent areas are also relevant (e.g. archiving rules, additional e-reporting requirements); and, on the other, non-EU invoicing rules come into play (e.g. the *e-fatura* reform in Portugal, the B2G and B2B obligations in Italy).

The negligible role in the uptake of structured e-invoices results from the text of the Directive itself, which reflects a conscious policy choice of not distinguishing between structured and unstructured e-invoices. By not differentiating between the two e-invoice formats and enforcing the technology-neutrality principle, the Directive does not promote the use of automatically processable documents. Indeed, stakeholders largely confirm that:

- large companies adopt structured e-invoicing purely for business reasons, and namely, a better control of the order-to-payment cycle and cost savings in invoice handling, especially in the passive cycle; and
- the almost exclusive reasons why micro and small companies use structured e-invoicing are: (i) compliance with B2G requirements; or (ii) the imposition of a structured format by a large customer.

For the uptake of unstructured e-invoice, the Directive is considered as having played a significant role in the Member States in which it affected the applicable legal framework. Obviously, this is not the case in countries where the e-invoicing legal framework was already liberal (such as the UK or Scandinavian countries). In the other countries, it played a positive role by simplifying the pre-existing requirements (e.g. in Germany) or by providing economic operators with the legal certainty that paper and e-invoices were both valid for claiming VAT deduction (as in Poland and Romania). Country-specific effects in the fieldwork Member States are described in Box 14 below.

The **simplification of the national frameworks** mostly results from (i) the technology-neutral formulation of Article 233, and (ii) the, possibly unintended, effect of a lax enforcement of the BCAT option. Leaving companies free to use unsigned PDFs without burdening them with stringent internal control requirements was a key lever for promoting the diffusion of unstructured e-invoices. While the simplification was important, the **increased legal certainty** was crucial in the countries where companies did not trust exchanging PDF invoices for fear of being challenged during tax audits. This depends on the joint provision of the new definition in Article 217, which clearly states what an e-invoice is, and the equal treatment principle enshrined in Article 218.

The role in promoting the uptake of unstructured e-invoices was comparatively more important for micro companies, because larger companies could better comply with the previous regulatory requirements. Indeed, e-invoicing solutions could have already been adopted prior the approval of the SID, provided that an EDI or an e-signature was adopted. The larger the company, the more likely that it had the awareness, expertise, and economic incentive to already adopt one of either solutions. The lowering of regulatory requirements that ensued from the SID was rather disproportionately beneficial for micro companies, which have less to gain from the adoption of e-invoice solutions.

Box 14 – e-Invoice uptake and Directive impact in fieldwork Member States

In **France**, the rate of use of e-invoicing is reported to have increased significantly, especially as far as the use of e-mails with PDF attachments is concerned. The role of the Directive is not considered prominent, also because e-invoicing requirements underwent only a moderate relaxation therein. The rules on public procurement (in France, B2G e-invoicing is mandatory since 2017 for large enterprises) played a positive role towards the increase in the e-invoicing adoption. The stricter requirements on BCAT have seemingly not had a negative impact on e-invoice uptake, and the majority of French companies reportedly send e-mails with PDF attachments without internal control procedures.

In **Germany**, an increase was observed after the removal of the national requirements on e-invoices due to the Directive implementation. These requirements deterred especially micro and small companies from using unstructured e-invoices. However, it was also reported that a share of them would still exchange PDFs even prior to this simplification, printing and handling them as paper invoices – though this is not compliant with the national VAT rules. Given that most utility service providers have switched to PDFs as the default format – unless the customer accepts to pay an extra fee – up to 90% of German companies are deemed having received at least one PDF invoice. The diffusion of the structured format is considerably lower, also given that the B2B obligation is yet to come into force, and the current discussion on whether *Zugferd* or *XRechnung* will be the standard format.

In **Italy**, PDF invoices are now commonly issued by the majority of companies, with the exception of those working in industries where B2C transactions are prevalent (restaurant and accommodation providers, retailers, small crafts). The uptake has progressively increased. Although PDFs were already used before the transposition of the SID, mostly printed and handled as paper invoices as allowed by the national administrative practice, the modifications triggered by the Directive gave more certainty to operators exchanging PDF invoices. The familiarity with e-invoicing technologies was supported by the B2G obligation, which is considered by all stakeholders as the main driver of the change in business mentality and practices.

Before 2009, a marginal use of e-invoicing was reported in **the Netherlands**, as (i) e-signature was (and remains) rather uncommon, and (ii) SMEs essentially issued paper-based invoices. The relaxation of the rules for e-invoicing that occurred in anticipation of the Directive have reportedly led to a significant increase of the e-invoicing uptake, primarily as far as unstructured messages (emails with PDF attachments) are concerned. Indeed, this easy and cheap method of issuing e-invoices was not confronted by the challenges typically faced in other Member States concerning the existence of an adequate BCAT, in light with the 'horizontal monitoring' approach to fiscal compliance that was already in place¹⁷⁰.

In **Portugal**, unstructured e-invoices are increasingly commonly issued by SMEs, especially in the services sector¹⁷¹, to both final consumers and other SMEs. The main role in the uptake increase was, however, due to the *e-fatura* reform. Big companies could be more reluctant to accept PDFs, given BCAT requirements. To the contrary, BCAT is not perceived as an obstacle to the diffusion of unstructured e-invoices across SMEs, even though very few of them would have in place internal control procedures. Indeed, thanks to the *e-fatura* system, the tax authority has all the information needed on the invoices exchanged; hence, it is considered unlikely that SMEs issuing e-invoices as PDFs without BCAT will be challenged during fiscal controls.

In **Poland** and **Romania**, the uptake was considered as relatively lower, because of a declining, but still persisting preference by a minority of economic operators to handle fiscal documents in paper form. However, the use of PDF e-invoices is considered to have grown among the vast part of the business population, as they become aware of the equal treatment of paper and e-invoices. Unstructured e-invoices are used by a small minority of companies, and, in particular, by those having to deal with large foreign customers imposing the use of EDIs, or by the subsidiaries of large multinational groups.

5.1.3.2 Quantitative evidence

In order to quantitatively assess the role of the Directive on the increase of the uptake of e-invoicing, **the evolution of the share of businesses using e-invoices was compared across three groups of Member States in which e-invoicing requirements were simplified to a different extent as a result of the Directive transposition** (as illustrated in Box 15). More specifically, the hypothesis that a stronger relaxation of legal requirements resulted in a comparatively higher increase in the uptake of e-invoicing was tested for different types of e-invoices and across different

¹⁷⁰ Cf. note 101 above.

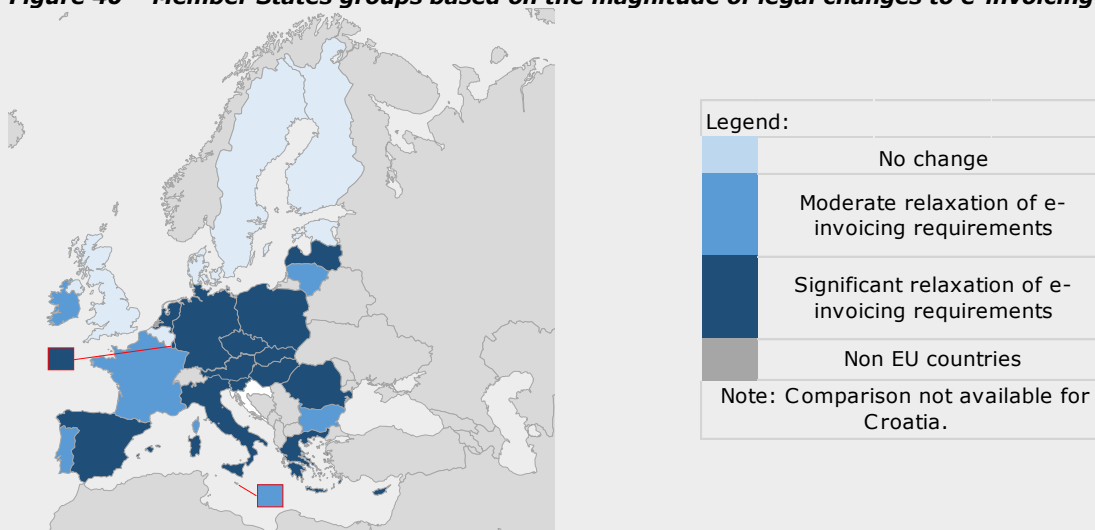
¹⁷¹ In the case of companies supplying goods, as indicated above, there is an obligation to have a printed invoice among transport documents.

firm's sizes, comparing the annual growth rates recorded by the three different groups of countries after the transposition of the Directive. The approach has certain limitations, both methodological (the clustering based on the level of e-invoicing regulatory relaxation is inevitably arbitrary to a certain extent) and operational ones (as illustrated above, the Eurostat time series are very short and, in some years, there are data gaps at country level). Still, **the key results are broadly in line with the qualitative evidence presented above and thus support the estimate of the attribution factor.**

Box 15 – Clustering based on the change of the e-invoicing regulatory framework after the transposition of the Directive

Member States have been clustered into three groups, based on the scope of the changes triggered by the implementation of e-invoicing provisions, and namely: (i) 'significant relaxation', (ii) 'moderate relaxation', and (iii) 'no change'. The clustering exercise is based on the Member States' categorisation according to the strictness of national e-invoicing rules illustrated in Section 4.2 above. Based on the comparison of the categorisation before and after the transposition of the Directive, more or less significant relaxation of the e-invoicing requirements has been recorded by all Member States, with the exception of the six Member States that were already characterised by a liberal approach to e-invoicing (Group 0). As illustrated in section 4.2, a total of 15 Member States registered a 'significant relaxation' (Group 2), including 13 Member States that transitioned from a 'very strict' or 'strict' to a 'liberal' approach and two Member States that started with a 'very strict' approach and now have implemented a 'moderately strict' approach. Six Member States implemented a 'moderate relaxation' (Group 1), of which four transitioned from 'moderately strict' to 'liberal' and two from 'strict' to 'moderately strict'.

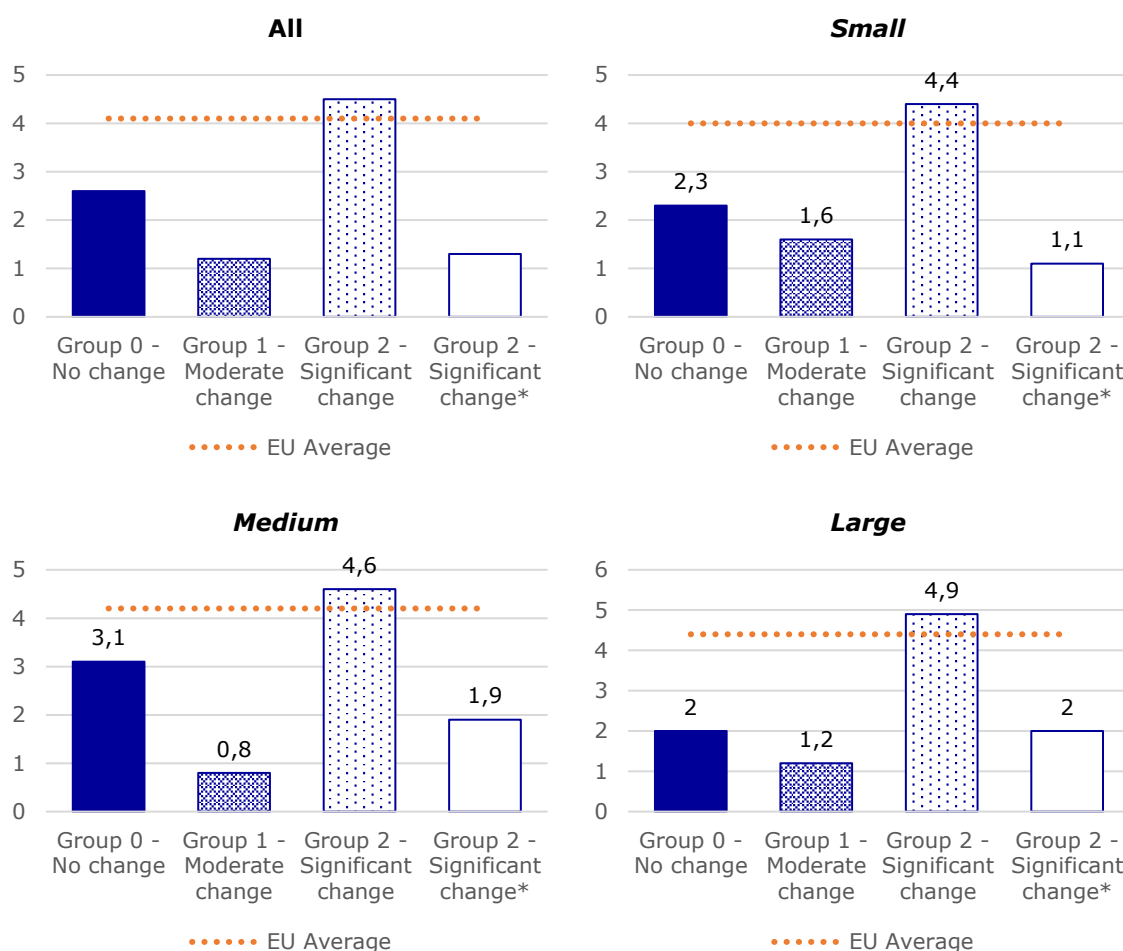
Figure 40 – Member States groups based on the magnitude of legal changes to e-invoicing



Source: Authors' own elaboration.

Structured e-invoices. As illustrated in Figure 41, in the group of countries where e-invoicing requirements were significantly relaxed (Group 2), the share of **businesses with more than 10 employees** sending / receiving structured e-invoices increased by 4.5 p.p. per year between 2014 and 2017, at a significantly faster growth rate compared to Member States falling in Group 0, where no e-invoicing regulatory change occurred (2.6 p.p.). However, the differential growth is mostly explained by the data from Member States that have adopted mandatory B2G e-invoicing. Indeed, when these countries are excluded from the computation, the estimated annual increment in Group 2 declines (down to 1.3 p.p.), i.e. half of Group 0, and in line with the result of the Member States where a moderate relaxation was recorded (1.2 p.p.). Therefore, **the analysis tends to confirm that a stronger relaxation of e-invoicing legal requirements did not result in an increase in the use of structured e-invoices, while mandatory B2G e-invoicing has seemingly been the real driver.**

Figure 41 – Annual change in the uptake of structured e-invoices for firms with more than 10 employees (2014-2017, in p.p.)

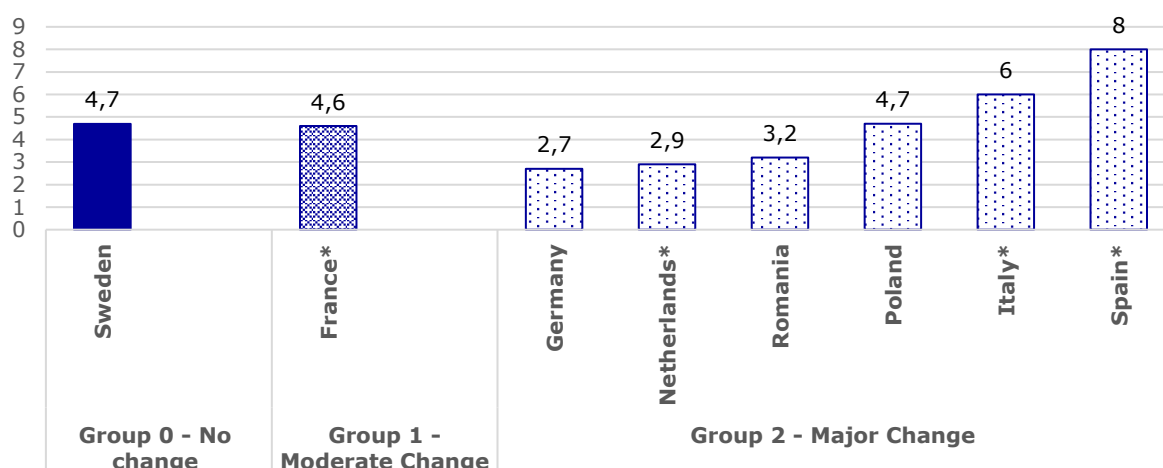


Note: * = Without Member States with mandatory B2G e-invoicing.

Source: Authors' elaboration on Eurostat data.

A similar analysis was carried out for **micro firms**, based on the data of the business survey. The number of Member States covered is lower, with only one country falling in the Groups 0 and 1, which obviously reduces the representativeness of the analysis. However, the following considerations can be advanced. **The relaxation of e-invoicing requirements seemingly did not play a clear role.** Between 2014 and 2018 the annual increment of the share of micro businesses sending / receiving structured e-invoices in Group 2 largely varies, ranging between 2.7 p.p. in Germany and 8.0 in Spain. Again, the introduction of **mandatory B2G e-invoicing for suppliers had a major influence of this trend.** When Spain and Italy are excluded, all other Member States of Group 2 recorded an average annual increment in line or below that of Sweden (Group 0) and France (Group 1).

Figure 42 – Annual change in the uptake of structured e-invoices for micro firms (2014-2018, in p.p.)

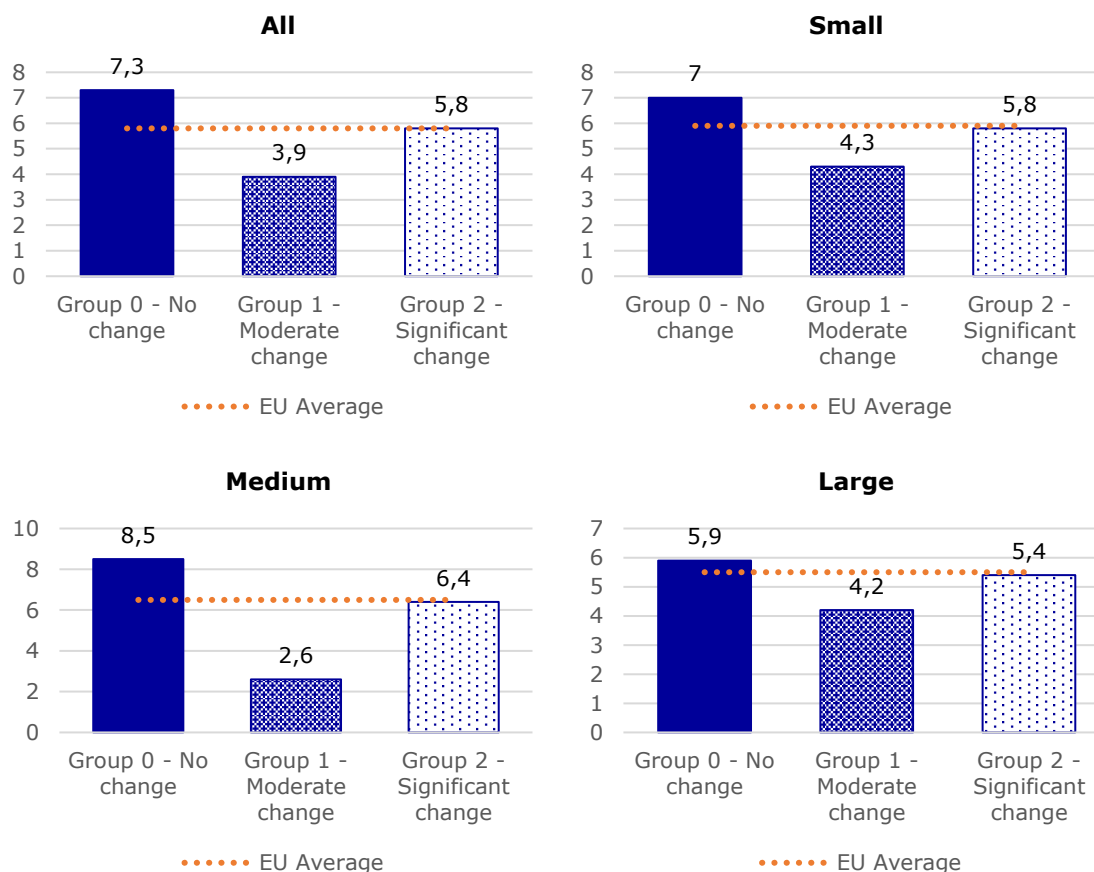


*Member States with mandatory B2G e-invoicing.

Source: Authors' elaboration on business survey data.

Unstructured e-invoices. The same exercise was replicated to assess the Directive role on the uptake of unstructured e-invoices. As illustrated in Figure 43, **there is no clear evidence that the increase in the use of unstructured e-invoices by companies with more than 10 employees has been affected by the change of the regulatory framework.** Indeed, Member States falling in Group 0 recorded the larger annual increment of the share of businesses issuing unstructured e-invoices between 2014 and 2017 (for all size classes).

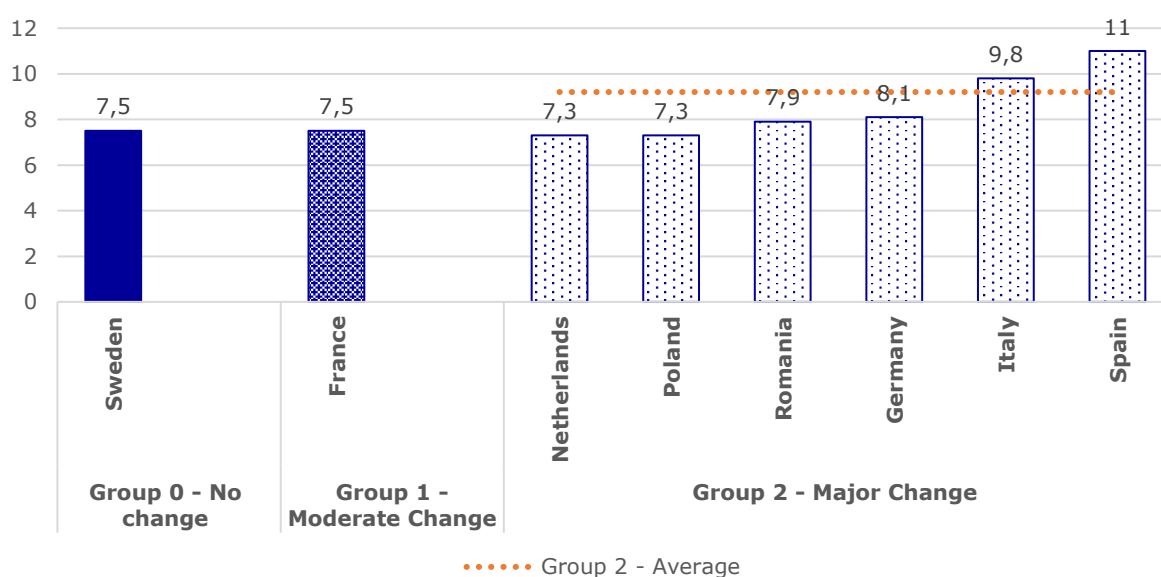
Figure 43 – Annual change in the uptake of unstructured e-invoices B2BG for firms with more than 10 employees (2014-2017, in p.p.)



Source: Authors' elaboration on Eurostat data.

Finally, as expected, **the Directive seems to have played a role towards the increase in the use of unstructured e-invoices among micro firms**. Based on the data from the business survey, between 2014 and 2018, both Sweden (Group 0) and France (Group 1) recorded an increment of 7.5 p.p. per year, below the average value of the countries falling in Group 2, i.e. 9.2 p.p. per year. Among Member States where significant e-invoicing regulatory changes have occurred, only two Member States recorded an increment slightly below those in Groups 0 and 1. However, in the case of the Netherlands, the Directive role could have materialized earlier (as the legal change was introduced in 2009), which seems to be confirmed by the highest uptake among the eight Member States in 2014. In the case of Poland, the above described firms' reluctance to move away from long-established practices, including the printing – common among SMEs – of all PDF invoices is likely explain the lower growth.

Figure 44 – Annual change in the uptake of unstructured e-invoices for micro firms (2014-2018, in p.p.)



Source: Authors' elaboration on business survey data.

The attribution factor. Based on the analysis of the qualitative evidence gathered from targeted consultations, it emerged that the **Directive played a role for the diffusion of unstructured e-invoices, which is more significant for micro companies. To the contrary, the Directive had no or negligible role on structured e-invoices**. In relative terms, the Directive was only one of the various drivers which had an impact on e-invoicing uptake, the most important of which have been identified as the demand from customers and suppliers, and the introduction of mandatory e-invoicing for B2G transactions. This finding needs to be consolidated in **the attribution factor, which describes the share of the uptake in the use of e-invoicing recorded over the period 2014-2017 that can be attributed to the Directive**. In a nutshell, this factor measures the 'real' impact of the Directive on the use of e-invoicing, discounting the effect of the other drivers.

The **quantitative analysis is consistent on these findings and provided useful information for setting the attribution factor**. When it comes to structured e-invoices, it showed that no differences in the uptake emerge. As for unstructured e-invoices by micro companies, Member States in which the effects of the Directive led to a significant relaxation of e-invoicing requirements recorded a growth of about 25% higher compared to the 'no change' Group. Thus, in the Member States belonging to Group 2, the attribution factor was estimated at 25%, meaning that, in these countries,

the Directive is attributed about a quarter of the increased uptake of unstructured e-invoices across micro enterprises. For Group 1, this value was estimated backwards and set at 15%.

For companies with more than 10 employees, no differences in the uptake trends of unstructured e-invoices across the groups were recorded. However, the qualitative findings described above point out that the Directive fostered the uptake of this e-invoicing solution also across larger companies, although the impact was lower than for micro companies. Based on these considerations, this value was thus set at 10% for Group 2 and 5% for Group 1. The attribution factors for the various size classes and groups are summarised in Table 17.

Table 17 – Directive ‘share’ of the unstructured e-invoicing uptake: Attribution factor

Business size	Magnitude of legal change		
	Group 0	Group 1	Group 2
Micro	0%	15%	25%
Companies with more than 10 employees	0%	5%	10%

Source: Authors’ own elaboration.

5.2 Reduction of administrative burdens

The Directive was supposed to reduce administrative burdens on businesses by acting on two sets of provisions: (i) those governing **the issuance and content of invoices**, and (ii) the **e-invoicing requirements**. In both areas, the Directive intervened by simplifying and harmonising the applicable requirements. The simplification was supposed to reduce administrative burdens for the overall business population, while the harmonisation would have reduced burdens on cross-border operators. Furthermore, by intervening on e-invoicing requirements, the Directive would have spurred companies to switch from paper to e-invoices, which are considered a cheaper alternative.

5.2.1 Quantitative assessment

All in all, **the Directive is estimated to have reduced administrative burdens on companies by about EUR 540 million in 2017, and about EUR 1.04 billion over the 2014-2017 period**¹⁷². Most of these savings – EUR 920 million – are due to the higher uptake in **unstructured e-invoicing** attributed to the Directive. To the contrary, Directive provisions were not targeted to, and thus did not result in, an increase in the uptake of structured e-invoices. This implies that the significant savings that can be generated by the automatization of the passive cycle, i.e. the automatic handling of the invoices received, did not materialise. Few savings were achieved in the area of e-invoices received, and amounted to about EUR 3.4 million in 2017, and EUR 6.4 million over the whole period.

With respect to the revision of the requirements in the area of invoicing issuance and content, the burden reduction is assessed as narrow. The only provision that resulted in significant savings was the change to the **simplified invoicing regime**, which is attributed an annual saving of EUR 38 million¹⁷³.

¹⁷² The calculations, based on the Standard Cost Model, are describe in the Section 6 below.

¹⁷³ Within a plausible range of EUR 22 – 70 million following scenario analysis.

Table 18 – Administrative burden reduction (2015-2017, EUR million)

Invoicing area	Invoicing activity / regime	2015	2016	2017	Cumulated	Share of total
e-Invoicing	Issuance	125	292	501	917	88%
	Receipt	0.9	2.1	3.4	6.4	1%
Invoice issuance and content	Simplified	38	38	38	114	11%
Total		164	332	542	1,038	100%

Source: Authors' own elaboration

5.2.2 Factors limiting the Directive impact

The provisions in the area of **invoice issuance and content** did not generate a significant burden reduction because they had a limited impact on the invoicing process. Indeed, **minor problems in terms of unnecessary burdens existed before the simplifications were introduced** – there were provisions to be clarified, rather than costs to be cut. More in detail¹⁷⁴:

- Stakeholders have appreciated the possibility of using the **new and clearer clauses on standard invoices** (Article 226) for e.g. self-billing and reverse charge. However, as discussed in Section 6.2.2 below, the savings are marginal, because the effect on the invoicing process is also marginal, as this just requires a minimal simplification of the invoicing template or software.
- The new regime for the **provision of financial services did not alter the situation on the ground**, as Member States did not impose invoicing obligations on financial suppliers in most cases, except when they willingly renounce the VAT exemption for their own tax planning consideration. At the same time, the Directive now explicitly excludes intra-EU transactions from those for which an invoice can be required, thus the rules became clearer.
- As for **summary invoices**, the Directive has removed the possibility for introducing national limitations to its usage (e.g. in terms of type of transactions) and mandated a minimum coverage period of one month. However, national limitations were in place only in four Member States, while only one country increased the coverage period as a result of the Directive. Furthermore, the Directive remains silent on other aspects, such as the possibility to require other types of documents (e.g. delivery notes, transport slips) to be attached to the invoice.

Several contextual factors also explain the limited potential for burden savings in the area of invoicing issuance and content. First and foremost, **invoicing is a routine activity for companies**, and they are very much acquainted with complying with the invoicing rules applicable to their usual transactions. When entering a new market or undertaking a different activity, they have to familiarise with new requirements, but (i) on one side, the frequency of this occurrence is rare, and (ii) when this happens, an interaction with the tax advisor or the customer can provide the necessary information at no or limited costs. For standard transactions, invoicing is hardly perceived as a costly activity at all, except for very large issuers and receivers.

Secondly, **not all the costs generated by the invoicing process are additional burdens**. All companies issue some form of document to prove their transactions, and, in particular, the goods or services supplied and the price received. This is done for business reasons (payment receipt) and for other legal motivations (in particular, accounting rules) also by economic operators not subject to VAT. The VAT requirements obviously add an information burden, in terms of which items are to be included in the

¹⁷⁴ For provisions affecting cross-border transactions and self-billing, please refer to Section 5.3.2 below.

invoice and how. However, reportedly, the real burden and complexity do not originate from the invoicing rules themselves, but from understanding the underlying VAT regimes (e.g., as mentioned by several stakeholders, the domestic reverse charge or the definition of 'supply of goods with installations' in case of cross-border transactions).

Importantly, as illustrated in Section 4.3, the **business resistance to changes in invoicing practices** is a hindering factor to the uptake and impact of certain simplifications introduced by the SID. This implies that, even when new and less costly invoicing regimes are designed or promoted, their uptake may remain uneven.

Finally, and on a different note, even prior to the SID, **invoicing requirements in adjacent areas were not a hindering factor limiting the reduction of administrative burdens**. As for e-invoicing, no other area requires or 'pushes' economic operators to use paper documents rather than electronic ones. As for issuance and content requirements more in general, it is made very clear by VAT practitioners and economic operators that, as far as invoices are concerned, VAT requirements take precedence over other rules, so that no conflicts capable of generating unnecessary burden have arisen.

On a more positive side, the limited impact in terms of the administrative burden reduction of these provisions should not be discounted as a negative evaluation of their effectiveness, as they did deliver two key benefits for stakeholders, namely (i) an **increase in legal certainty** due to simpler and more harmonised requirements, and (ii) a **better functioning of invoicing rules within the Internal Market**. The importance of these objectives is actually ranked higher than simplification by business stakeholders.

5.3 Functioning of the Internal Market

The Directive is expected to have improved the functioning of the Internal Market by reducing the fragmentation of e-invoicing and e-invoicing requirements and by creating the conditions for a more intense competition in the market for e-invoicing service providers. As a result, the Directive was expected to contribute to:

- 1) increasing the **uptake of e-invoicing in cross-border transactions**;
- 2) improving the **legal certainty and reducing the burdens generated by cross-border invoicing rules**, and, thus, reducing regulatory barriers to intra-EU trade;
- 3) fostering **lower prices and/or increased availability of suppliers for e-invoicing services**.

5.3.1 Uptake of e-invoicing in cross-border transactions

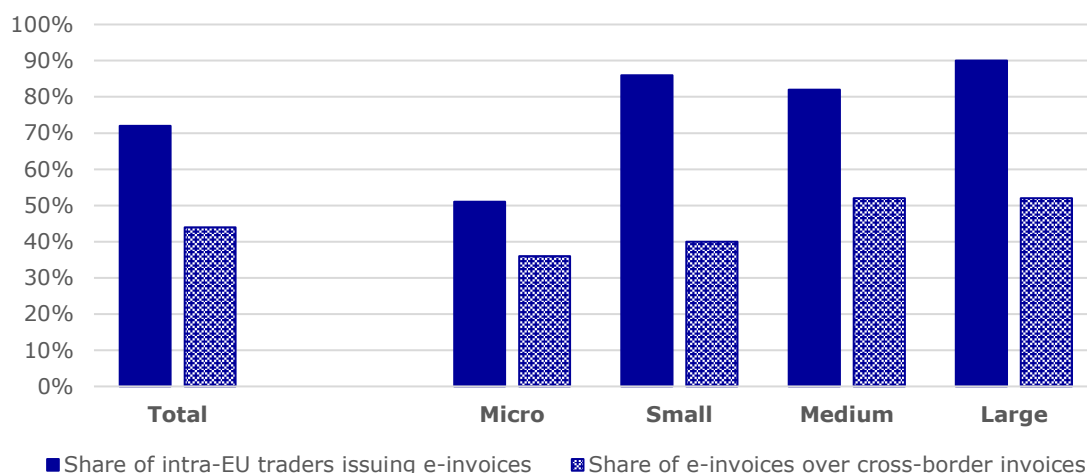
Based on business survey data extrapolated at EU level¹⁷⁵, in 2018, the share of companies having issued a cross-border e-invoice was at 34%¹⁷⁶. Considering only companies that sell their products and services in another Member State, the share jumps to 72%. In a nutshell, **three in four intra-EU traders use e-invoices**. Differences exist across size classes, so that the larger the trader, the more likely the usage of e-invoices. More in details, 51% of micro companies operating cross-border use e-invoices, while the share is 90% for large companies; the share for small and

¹⁷⁵ Based on size classes and industries populations retrieved from Eurostat Structural Business Statistics and adjusted for the number of companies with internet access (Eurostat ICT usage in enterprises).

¹⁷⁶ The statistics for invoices received show very similar results, so that only issued invoices are discussed in this Section.

medium enterprise hovers around 85%. In terms of invoice volume, **e-invoices represent about 44% of the total intra-EU invoices issued**, with micro companies issuing about 36% of their cross-border invoices in electronic form, while for large enterprises the share reaches up to 52%.

Figure 45 – Share of companies issuing e-invoices for cross-border transactions and share of e-invoices over cross-border invoices (2017)



Source: Authors' elaboration based on business survey data.

The above picture represents a major increase compared to 2014, when the share of EU companies that issued a cross-border e-invoice was at 12% at that time. Considering only cross-border operators, **one in four intra-EU traders issued e-invoices (27%)**, a figure which was comparatively lower than the uptake of unstructured e-invoices in the whole population at that time. Firm size differences were significantly less pronounced, so that the share was 24% for micro companies and 30% for large enterprises active cross-border.

The share of companies issuing e-invoices (72%) is higher among intra-EU traders than in the overall business population. More in details, among micro companies, intra-EU traders are about as likely to use e-invoices as the general population (51%), while, for the other size classes, the share of intra-EU traders using e-invoices is about 20 p.p. higher. Focusing on the number of invoices, the share of cross-border e-invoices is somewhat lower than the overall share, at 44% against 52%.

The statistical analysis and, in particular, the current similar propensity to use e-invoices in the overall population and across intra-EU traders supports the finding that **today the use of cross-border e-invoices is not significantly more complex compared to domestic transactions.** At the same time, the fact that the uptake across intra-EU traders has not only increased, but, more importantly, caught up with that of the overall population suggests that **some of the complexities which made cross-border e-invoicing more difficult have been removed**, thus improving the functioning of the Internal Market.

The role of the Directive in having removed some of the regulatory barriers for cross-border invoicing is largely acknowledged by stakeholders. In the word of one European stakeholder, 'the real advantage of the SID was the limitation of the freedom of Member States in whether and how certain invoicing options could be implemented'. Examples of how the SID eased life for businesses include the removal of specific e-invoicing requirements in Germany and the possibility for multi-national enterprises to adopt uniform invoicing policies across all of their subsidiaries – an aspect mentioned by several Romanian stakeholders.

Though the Directive is acknowledged to have improved the situation, several stakeholders active cross-border still point out to an insufficient level of harmonisation in other areas outside of invoicing rules, and, in particular, to **the additional e-reporting requirements** which have been and are being added by several Member States in a non-harmonised way¹⁷⁷, the **national formats and platforms for exchanging B2G e-invoices**, and the specific **archiving rules for e-documents**¹⁷⁸.

5.3.2 Legal certainty and burdensomeness of cross-border invoicing rules

Four significant changes were introduced to the rules applicable to cross-border invoices: (i) the new rules on the applicable invoicing regimes (Article 219a); (ii) the uniform time limit for the issuance of invoices for intra-EU transactions (Article 222); (iii) the new rules on currency conversion (Articles 91 and 230); and (iv) the simplified content of invoices for cross-border transactions subject to reverse charge (Article 226a). Furthermore, the new rules on self-billing (Article 224) also simplified the use of this regime for cross-border transactions. **These changes are considered as having increased the legal certainty of the invoicing rules applicable to intra-EU transactions, while not reducing administrative burdens for cross-border operators.** Three of the above-mentioned revisions had a more significant impact, and namely:

- **Article 219a, which was praised by most of the stakeholders engaged in cross-border operations because it provides clarity in an area which was previously unregulated.** On one side, this reduced the risk that tax authorities would challenge a valid invoice fulfilling other national rules; on the other, this smoothed cross-border transactions because it prevented customers from asking the received invoice to conform to their own rules.
- **the new rules on currency conversion, as it is now possible in all EU countries to make use of the ECB rates.** This removed a regulatory barrier in the countries in which only domestically-settled rates could be used, which was a significant issue mostly for very large multinationals. At the same time, the impact of this provision on company's practice was limited. Most cross-border operators continue to follow their domestic or (in the Member States in which this is possible) company internal rules. First, because of path dependency and the general resistance to change in fiscal practices. Secondly, because, in some cases, domestic rules are more fit to business needs, in particular when they make reference to average monthly rates. In this respect, some stakeholders criticised the current version of Article 91 for not specifying the reference period to be used, giving Member States the possibility for imposing the use of daily rates, which is perceived as an unnecessary burden.
- Concerning the simplification of **self-billing**, this simplification was also positively praised as **providing more legal certainty**. Multinational enterprises stated that the harmonisation improved the ease of use of self-billing in cross-border transactions, even if costs remained about the same: *'we have much less to worry [when entering into a prior agreement]; it is not about saving time for entering into it – it is anyhow trivial and we usually do it by including an additional standard clause in purchase contract. The key point is about the increase in legal certainty.'*

As for the new time limit for intra-EU transactions, any impact of this provision was very limited, as it did not affect the invoicing process and thus largely

¹⁷⁷ Cf. Section 4.7.1.1 above.

¹⁷⁸ As detailed in Section 4.4 and 4.7 above.

went unnoticed by economic operators. The rationale for this measure was to enhance tax control, and, in particular, the fight against MTIC frauds¹⁷⁹. Accordingly, it did not result in either more clarity for businesses, or in a lower complexity of invoicing rules. Indeed, companies kept issuing an invoice as soon as possible. Furthermore, firms still prefer to make reference to their domestic time limit when shorter¹⁸⁰, avoiding complying with two different prescriptions (*'it makes limited sense to have your accounting department working under two different time limits'*). In any case, the amended Article 222 fell short of the harmonisation potential that was enshrined in the original Commission proposal, which would have led to the introduction of a uniform time limit for all invoices – both domestic and cross-border. Importantly, however, the current discrepancy of time limits was not pointed out as an obstacle to the proper functioning of the Single Market.

The new Article 226a also went rather unnoticed, as it largely consolidated an existing practice, that is the VAT on cross-border transactions subject to reverse charge being annotated by the receiver. This provision has clarified that this practice is in line with the Directive, thus increasing legal clarity, but it did not affect the companies' behaviour and invoicing process, consequently not generating cost savings.

Box 16 – Invoice on payments on accounts for intra-EU supplies of goods

The SID removed the payments on accounts received before intra-EU supplies of goods from the transaction listed in Article 220 for which the issuance of an invoice is mandatory. However, based on Article 221, Member States may still require an invoice for these transactions. A full mapping of this optional provision had not been carried out, as it emerged as a possibly relevant change only at a later stage. Still feedback received from VAT practitioners and economic operators allowed to assess the impact of this change.

This simplification was not salient to most of VAT practitioners. As it concerned a very specific type of transactions, only few of them were even informed on the applicable requirements, and this resulted in sometimes inconsistent answers. By way of example, an invoice is still required in France, Hungary, Portugal, and Italy. To the contrary, the requirement is no longer in place in Austria, the Czech Republic, Belgium, Greece, and Spain. However, even in countries which removed the obligation, some companies would still issue an invoice for these transactions for business reasons (*'each payment received should be linked to an invoice'*). Given the limited implementation and the business reaction, it is unlikely that any significant saving emerged from this simplification.

5.3.3 Increasing competition in the market for e-invoicing services

The simpler and more harmonised rules introduced by the Directive could have improved the functioning of the Internal Market by reducing the barriers to competition in the market for the provision of e-invoicing services. In turn, this would increase cross-border market entry and decrease the switching costs for companies for resorting to another provider, thus eventually putting a downward pressure on market prices.

The level of competition in this market is generally perceived as moderate, with significant variations across Member States and market segments. First, in the countries where the national framework for e-invoicing was liberal even prior to the transposition of the Directive, the market conditions are more mature, and competition is generally stronger, also because the number of players is higher and switching costs lower, thanks to the existence of interoperability agreements. This is the case mainly for the UK and the Scandinavian countries. In most of the other countries, the market is less developed, with a lower number of players and thus weaker competitive pressures. Secondly, and most importantly, **two relevant markets seem to exist, based on the size of customers, with different players and competitive**

¹⁷⁹ Cf. Proposal at p. 4 and 7; cf. Section 4.6.

¹⁸⁰ A specific time limit for domestic transactions is in force in 23 Member States, and in 12 of them it is shorter than the one for intra-EU transactions.

conditions. On one side, there is the **high-end segment**, where customers consist of very large companies issuing or receiving a bulky volume of structured e-invoices (more than 1,000,000 per year). Only few e-invoicing service providers operate in these markets; international competition exists in this segment and moderately increased over the recent years. On the other side, there is the **low-end segment**, which includes the rest of the business population issuing or receiving at least 1,000 invoices per year. Several players, mostly domestic, entered this market segment from different origins. Alongside of 'pure' e-invoicing service providers, also ERP providers, storage companies and banks offer invoicing services to small and medium companies. Few of the international service providers compete in this segment, if any at all. No (or very limited) market supply exists so far for companies issuing less than 1,000 invoices per year¹⁸¹.

In the high-end segment, the harmonisation brought about by the Directive was seen as one of the positive factors in reducing barriers to entry in other EU markets. However, significant regulatory barriers to cross-border interoperability remain because of other legislation, and, in particular, national additional requirements and archiving rules¹⁸². To the contrary, **the effect of the Directive on the low-end segment has been negligible**, as the cross-border competition therein is still limited. In this segment, the predominance of domestic players depends both on structural factors (e.g. customer's proximity, international service providers focusing on much larger clients), as well as on national rules other than invoicing requirements. Again, archiving rules and additional e-reporting requirements work as an entry barrier to foreign providers. An increased competition in the low-end segment was recorded over the last years, but it originated from domestic players active in other industries expanding into the e-invoicing market.

The evolution of the competitive conditions described above resulted in **reportedly stable market prices**. A decrease has been observed only in countries where specific regulatory interventions popularised e-invoicing across micro and small companies, such as the mandatory requirements for B2G and B2B in Italy, or *e-fatura* in Portugal. Where the demand expands in response to legal changes, the e-invoicing services tend to become a 'commodity', and their price plummets, at least in the very low-end segment. However, in the markets in which the legal requirements have not (yet) spurred the demand among micro and small enterprises, most of the operators reported that the prices remained stable, especially in the high-end segment. Despite the more intense competition, the price per invoice remains higher for smaller companies, due to the economies of scale in the e-invoicing process. Finally, the price for cross-border transactions is reportedly higher than for domestic ones, also given the higher complexity of dealing with multiple jurisdictions.

5.4 SME promotion

Most of the measures of the SID are of a general nature, i.e. apply to large enterprises and SMEs alike. However, by simplifying the regulatory framework and, thus, reducing administrative burdens, they have the potential to be especially beneficial for SMEs, which usually suffer red tapes more than large companies due to their smaller size. Furthermore, **the Directive has also amended two invoicing regimes fully or partly targeted to SMEs, namely cash accounting and simplified invoices**.

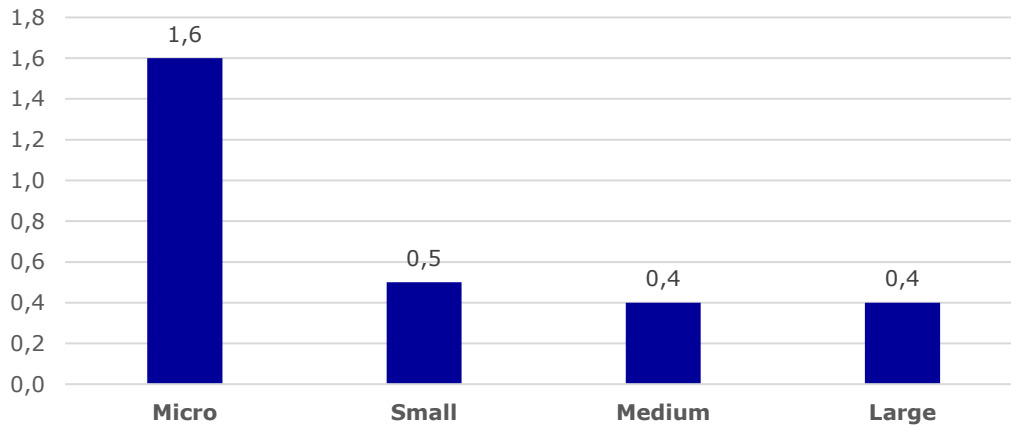
¹⁸¹ This market is developing in Italy, given the B2B obligation coming into force as of January, 2019.

¹⁸² Cf. EESPA's concerns about the proliferation of additional requirements on e-invoicing at national level, Resolution carried unanimously at the EESPA General Assembly Meeting of 19 May 2016, Tallinn Estonia, Document reference/no. EESPA-RES-2016-003, available at: <https://eespa.eu/eespas-concerns-about-the-proliferation-of-additional-requirements-on-e-invoicing-at-member-state-level/> (last accessed on October 2018).

5.4.1 The effect of a wider use of unstructured e-invoices on SMEs

As shown in Section 5.2, the bulk of the administrative burden generated by the Directive originates from the increased uptake of unstructured e-invoices. A higher e-invoicing uptake is still recorded by large companies (67% in 2017), while, for SMEs, the uptake goes from 51% in the micro segment to 65% for medium enterprises. However, the annual growth shows the opposite trend, so that the increase is the highest for micro companies (8.5 p.p. in the 2014-2017 period). Small and medium enterprises featured an annual growth of respectively 5.9 and 6.5 p.p., still higher than that of large firms (5.5 p.p.)¹⁸³. Furthermore, the role of the Directive in fostering the uptake of e-invoicing has been assessed as larger for micro companies compared to firms with more than 10 employees¹⁸⁴. Overall, the attributed effect on the annual growth was of 1.6 p.p. for micro companies, and about 0.5 p.p. for larger ones (see Figure 46). For these reasons, it appears clearly that **the impact of the Directive due to the more widespread use of e-invoicing was more significant on SMEs than on large companies.**

Figure 46 – Annual growth of the uptake of unstructured e-invoicing (2014-2017, in p.p.)



Source: Authors' elaboration on Eurostat and business survey data.

SMEs benefit from about 55% of the burden reduction due to the more widespread use of unstructured e-invoicing, while the rest go to large enterprises, although they represent about 0.2% of the overall business population. This is due to structural factors, and, most importantly, to the fact that large firms issue a disproportionately higher number of invoices, namely 41% of the total volume. On average, a large company issues a number of invoices equivalent to those issued by 400 micro firms. The difference appears more starkly when the burden reduction per company is calculated. Considering the cumulated amount of savings generated over the 2014-2017 attributable to the Directive, the savings for a micro company amounted to about EUR 75, a figure which increases to EUR 580 for small enterprises and EUR 5,900 for medium ones. **All in all, an SME (including micro) benefited, on average, from savings on the issuance of e-invoices of about EUR 110 over four years, while for a large company the benefits amounted to about EUR 120,000.**

The above figures help explaining several trends in the e-invoicing uptake. First and foremost, the uptake is higher when the firm size increases, because the economic attractiveness of e-invoicing solutions is significantly higher. Secondly, it also explains why micro companies using e-invoicing tend to stick with the simplest solutions (i.e. PDFs via email), since the potential benefits hardly justify, for most companies, the

¹⁸³ Cf. Sections 5.1 and 5.2 above.

¹⁸⁴ Cf. Section 5.1.3 above.

purchase of more automated solutions. Third, this indirectly confirms that a higher impact can be attributed by the Directive on micro companies, since, for the other size classes, considerations about the cost-effectiveness of the e-invoicing process play a larger role.

Table 19 – Share of invoices issued (both paper and electronic) and burden reduction, per class size

Business size	Share of invoices issued	Cumulated burden reduction (2015-2017)		
		Per company (EUR)	Total (EUR million)	Share of total
Micro	35.1%	74	323	35%
Small	12.3%	583	66	7%
Medium	11.3%	5,882	107	12%
SMEs	58.7%	110	496	54%
Large	41.3%	118,203	422	46%

Source: Authors' elaboration on Eurostat and business survey data.

5.4.2 Regulatory cost savings generated by SME-dedicated measures

Cash accounting. As described in Sections 3.3 and 4.5, a number of Member States have introduced or enlarged the cash accounting regime following the introduction of Article 167a. The resulting uptake of the scheme, however, remained limited, at less than 1% of EU micro enterprises (excluding Germany, where it is used by about half of the micro companies). Based on the current uptake in the EU countries in which the cash accounting scheme was introduced or expanded, it has been estimated that **about 60,000 additional micro enterprises benefitted of the cash accounting scheme thanks to the SID.**

The reasons for such a limited uptake are twofold. On one side, opting for the cash accounting regime requires an adjustment to the accountancy process, which may result in a higher advisor's fees. On the other side, the financial cost savings from cash accounting are very limited for a typical micro company. Indeed, as shown in details in Section 6.2.4 below, in normal times, the financial relief is limited to the first tax period. Consequently, **overall cost savings due to the higher uptake of the cash accounting scheme generated by the SID have been estimated at EUR 33 million, or about EUR 550 per micro enterprise.**

Importantly, however, cash accounting is more important for non-typical micro enterprises, and in non-normal times, such as during a severe economic crisis which deteriorates payment conditions. This further explains the limited uptake, since **only specific types of companies are likely to find disproportionately higher benefits** than the average population. In particular, cash accounting may be a significant safety net for the financial stability of micro companies which (i) operate on a seasonal basis - in this case, benefits recur each year; (ii) operate mostly in the B2G segment, since public authorities are, on average, worst payers; and (iii) depend on a small number of relatively large transactions, the delayed payment of which may endanger their financial stability.

Simplified invoicing. The changes introduced by the SID to the simplified invoice regime led **four countries¹⁸⁵ to introduce it, and 16 to enlarge its scope.** In terms of uptake, **the use of simplified invoices varies across countries, and it is largely limited to specific industries,** such as accommodation and restaurants, retail trade, petrol stations, and transport services.

¹⁸⁵ Bulgaria, Ireland, Italy, and Malta.

As discussed more in details in Section 6.2.2 below, **a simplified invoice allows micro companies to save between EUR 0.5 (if customers' data are to be included) and EUR 2.2 per invoice issued**. Given the uncertainty on the real diffusion of simplified invoices, **annual savings have been estimated to fall in the EUR 22-70 million range**, with a central value of EUR 38 million.

5.5 Tax control and VAT frauds

The effects of the SID on VAT fraud and evasion have been analysed by testing the following causal mechanisms:

- 1) by promoting the use of e-invoices, **the Directive might have improved the organisation of tax control activities**, e.g. by shortening the duration of VAT-related audits or increasing the number of audits; or
- 2) the different implementation modalities adopted at national level may have had an impact on the outcomes of tax control activities, and namely on **the level of VAT compliance and irregularities detected**¹⁸⁶.

The possible impacts of the SID have been assessed with respect to the following indicators:

- 1) **The adjusted VAT Gap**, as estimated by the existing studies¹⁸⁷. The analysis covers up to 24 EU countries¹⁸⁸, corresponding to 83% of total VAT revenues and 85% of total VAT Gap¹⁸⁹.
- 2) **The number and value of detected VAT irregularities**, based on the data from the targeted consultation of tax authorities.

The adjusted VAT Gap. The VAT Gap is a measure of total VAT non-compliance, which is usually expressed as percentage of VTTL. The adjusted evolution of the VAT Gap was considered an approximate measure to test the impact of the SID on VAT non-compliance, bearing in mind that many other factors, such as business cycle fluctuations, the scale of the tax administration, and the tax authorities' expenditure on IT, could have also had an effect between 2012 and 2016¹⁹⁰. Therefore, the data on VAT Gaps were adjusted for the business cycle fluctuations and scale of the tax administration¹⁹¹. **VAT Gaps in individual EU countries after adjustment for external factors** are presented in Figure 47.

¹⁸⁶ Cf. Section 4.6.

¹⁸⁷ VAT Gap Study 2014 – 2018.

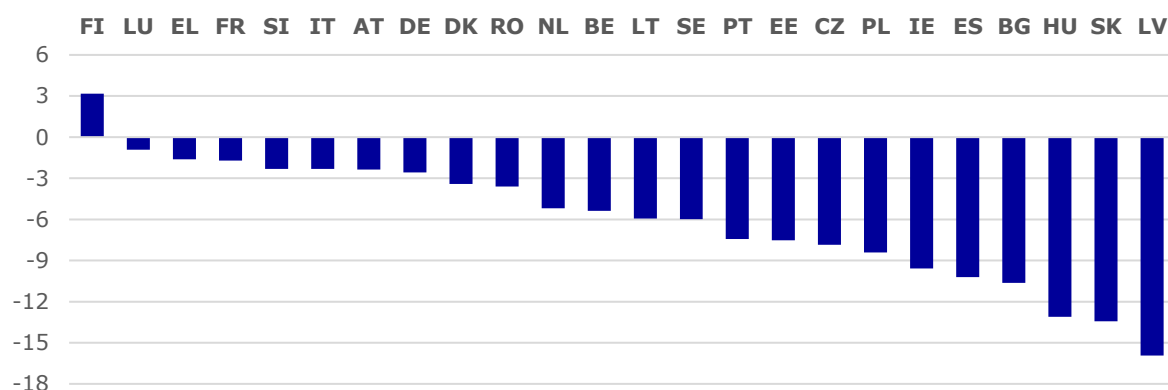
¹⁸⁸ Four countries are excluded either because data on 2012 VAT gap are not available (Croatia and Cyprus) or because the tax authorities did not submit the questionnaire (Malta and the UK).

¹⁸⁹ 2016 data.

¹⁹⁰ See Box 19 at the end of the section for methodological considerations.

¹⁹¹ For more details, cf. the Methodological Appendix. The inputs for the calculations were taken from the econometric model presented in the VAT Gap Study 2018. Data on scale of the tax administration (tax authorities' budgets) were taken from OECD Tax Administration database. Adjustment for the IT expenditure was not possible due to too large data gaps.

Figure 47 – Change in the VAT Gap adjusted for external factors (2012-2016, p.p.)

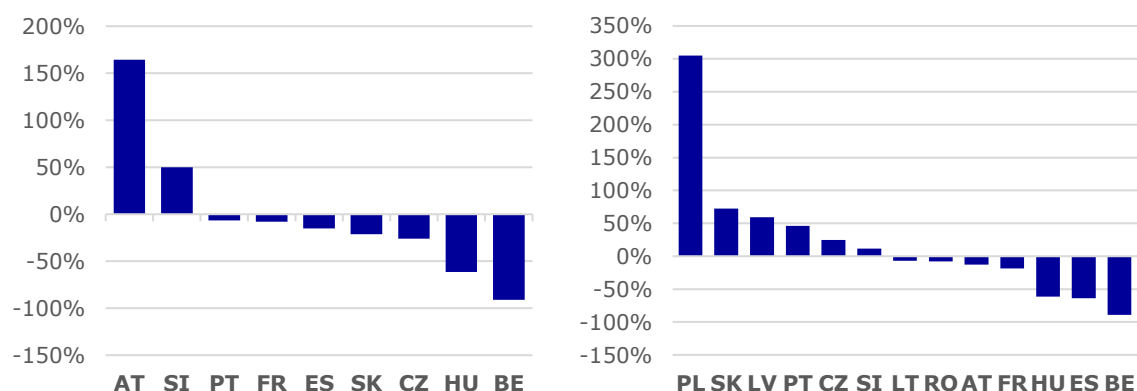


Source: Authors' elaboration on VAT Gap Study 2018.

Number and value of VAT irregularities. Tax authorities were asked to provide figures on the change in the **number of VAT irregularities** found in the last year before transposition of the SID and in the last available year. Complete answers were submitted by tax authorities from nine Member States (see left side of Figure 48)¹⁹². The number of detected irregularities increased only in two Member States, i.e. Austria and Slovenia. It dropped in Portugal, France, Spain, Slovakia, the Czech Republic, Hungary and Belgium. On average, the number of detected irregularities increased by 11.2% (weighted average), which is, however, strongly driven by the data reported from the Austrian tax authority with a more than 150% increase.

The right side of Figure 48 shows the change in the **value of VAT irregularities** between 2012 and 2017. Complete data was available for 13 countries, in six of which the value of detected irregularities increased and in the other seven it decreased¹⁹³. The highest increase by far was observed in Poland, where it grew by three times. Poland's outstanding performance was related to significant government efforts related to fighting tax fraud and evasion, which was not related to the SID or invoicing rules (see Box 17 below). The second highest increase was observed in Slovakia – 70%. The highest decrease was observed in Belgium, where it was connected to the lower number of conducted VAT-related audits.

Figure 48 – Change in the number (left) and value (right) of VAT irregularities before and after the Directive



Source: Targeted Consultation.

¹⁹² Representing 31% of total VAT revenues and 24% of the total VAT Gap.

¹⁹³ Countries in which the value of detected irregularities increased cover 7% of total VAT revenues and 10% of the total VAT Gap; countries where this value decreased represent 29% and 25% respectively.

Box 17 – Fight against VAT fraud in Poland

One of the priorities of the Polish government elected in 2015 was the fight against VAT fraud. Many new measures were introduced to increase VAT compliance, the most important of which are:

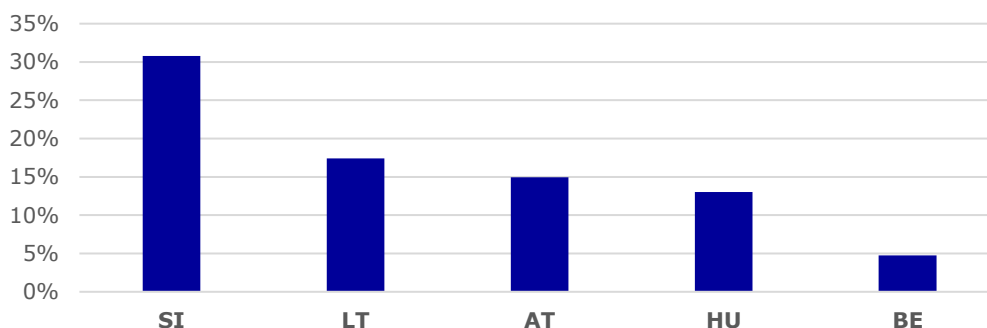
- Higher penalties for VAT fraudsters: maximum penalty for participation in a fraudulent scheme was increased to 25 years of prison (the same as for murder) plus confiscation of property. Moreover, a new unit specializing in VAT fraud was established within the Department of Organized Crime and Corruption of the General Prosecutor. Additionally, new institutions, i.e. Anticorruption Office and Organized Crime Office were involved in the hunt for VAT fraudsters.
- New reporting requirements: introduction of e-reporting, including SAF-T (Standard Audit File for Tax, Polish: *JPK–Jednolity Plik Kontrolny*), and real-time analysis system. A requirement to submit a VAT-related SAF-T (Polish: *JPK_VAT*) every month was introduced in three waves: (i) 1 July 2016 for large companies; (ii) 1 January 2017 for small and medium-sized enterprises; and (iii) 1 January 2018 for micro enterprises. A company might be also requested by the Tax Office to submit other types of SAF-T files.

The introduction of these new measures, especially e-reporting and real-time analysis systems, which allow for more precise selection of companies for audits, significantly increased the effectiveness of VAT-related audits. Despite the fact that the number of VAT-related audits decreased between 2012 and 2017 by 74.9%, the value of detected irregularities increased by 305.2%. As a result, an average value of detected irregularities per audit increased from EUR 11,806 to EUR 187,070 or by about 15 times.

5.5.1 Impact of the Directive on the organisation of tax control activities

Regarding the organisation of tax control activities, the SID could have led to the **shortening of the average duration of VAT-related audits** because of the more widespread use of e-invoicing. The tax authorities provided information on the average duration of VAT-related audits in the last available year and in the last year preceding transposition of the SID. However, only five Member States could provide detailed data¹⁹⁴. As all of those Member States show an increase in the average duration of audits, **the available data does not show an impact of the SID on shortening average durations of VAT-related audits**. A possible explanation for longer duration of audits could be that tax authorities concentrated more on taxable entities that have a higher risk of being involved in tax fraud or evasion activities. If it was the case, one could expect an increase in the average value of detected irregularities. However, the figures show this assumption is not necessarily true as the average value of detected irregularities decreased in most of these countries (Austria, Hungary, and Slovenia) and increased only in Belgium¹⁹⁵. The results need to be interpreted with caution, since a majority of tax authorities did not provide relevant information. Figure 49 presents the results for the five Member States.

Figure 49 – Average duration of VAT-related audit (% change, 2012-2017)



Source: Targeted Consultation.

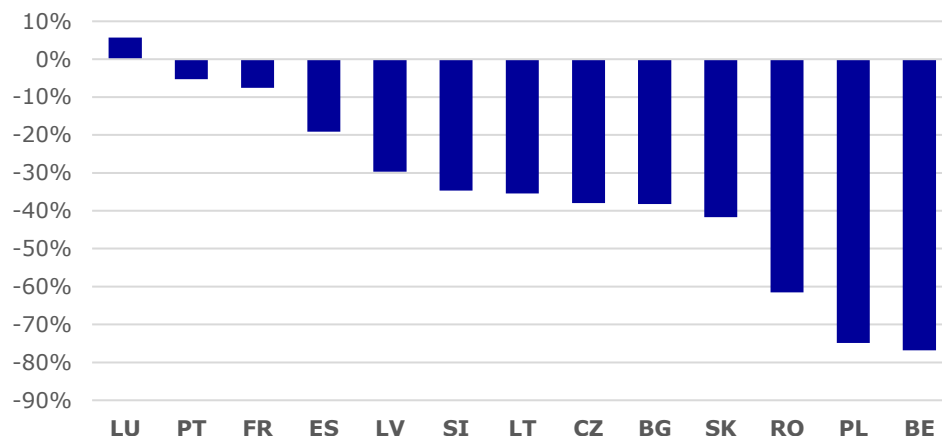
Similarly, **the data also does not indicate that the SID has allowed tax authorities to perform more VAT-related audits, due to a more frequent use of**

¹⁹⁴ Representing 7% of total VAT revenues and 5.5% of the total VAT Gap.

¹⁹⁵ Data on detected irregularities in Lithuania is not available,

e-invoices. Among the 13 Member States that provided complete data, the number of audits increased only in one of them, namely Luxembourg. The other 12 countries show a decrease, which is in some of them and accumulates to an average decrease of 52.1% (weighted average).

Figure 50 – Number of VAT-related audits (% change, 2012-2017)



Source: Targeted Consultation.

5.5.2 Impact of the SID on VAT compliance

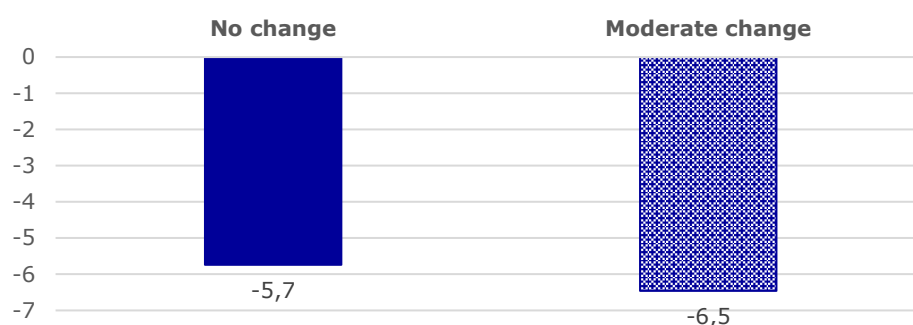
To assess **if and to what extent the implementation modalities of the SID have affected the fight against VAT fraud**, two specific impacts have been analysed, namely: (i) **whether the relaxation of invoicing requirements was detrimental to tax control**; and (ii) **whether the relaxation of e-invoicing requirements**, which, as discussed above, was instrumental in increasing the uptake of e-invoicing¹⁹⁶, **positively affected tax control activities**.

The impact of changes to invoicing requirements. In order to test whether the SID had an adverse effect on tax control activities because of the simplification of the invoicing requirements, the Member States were categorised in two groups, based on the clustering presented in section 4.3.1¹⁹⁷. Fifteen Member States fall in Group 0 with no significant changes to invoicing requirements, and nine in Group 1, with a moderate relaxation of requirements. The analysis of the change in the adjusted VAT Gap shows **no negative effects of the relaxation of invoicing requirements on VAT compliance**, as the countries with moderate relaxations show a 0.7 p.p. higher decrease in the VAT Gap than those with no significant changes.

¹⁹⁶ Cf. Section 5.1 above.

¹⁹⁷ Member States were categorized in three groups – liberal, strict, and very strict - according to the strictness of their invoicing requirements prior or after the SID. Group 0 includes 15 Member States which have remained in the same group, that is: (i) Austria, (ii) Belgium, (iii) Czech Republic; (iv) Germany; (v) Denmark; (vi) Estonia; (vii) Finland; (viii) France; (ix) Ireland; (x) Luxembourg; (xi) Latvia; (xii) the Netherlands; (xiii) Portugal, (xiv) Sweden, and (xv) Slovak Republic. Group 1 includes nine Member States which have improved their classification by one step: (i) Bulgaria; (ii) Greece; (iii) Spain; (iv) Hungary; (v) Italy; (vi) Lithuania; (vii) Poland; (viii) Romania; and (ix) Slovenia. Croatia improved by two steps, and Cyprus by one step, but no VAT Gap data are available for these countries.

Figure 51 – Change in VAT Gap adjusted for external factors and change of requirements regarding invoice issuance and content (p.p.)



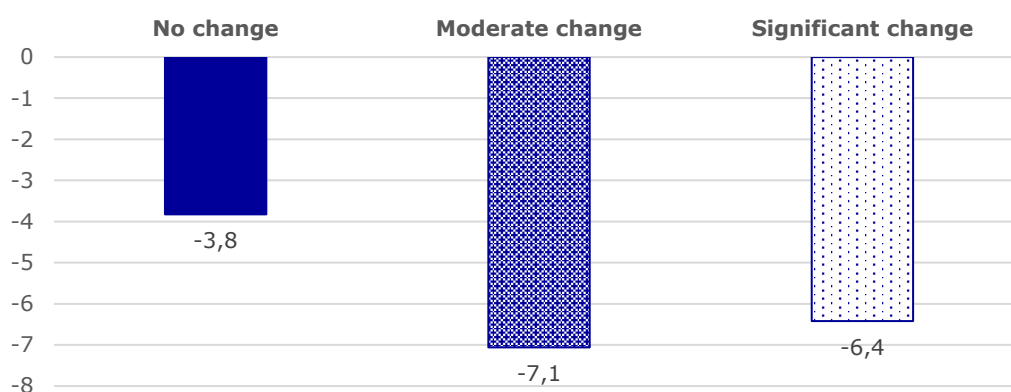
Source: Authors' elaboration based on the answers to the questionnaire for tax authorities and VAT Gap Study 2018.

As for the impact of changes to invoicing requirements on the value of detected VAT-related irregularities, **the results are mixed and do not provide solid evidence for the hypothesis that the relaxation of invoicing requirements had negative effects on the effectiveness of tax controls.** In Group 0, the value of detected VAT-related irregularities increased by 11.7%. Group 1 has an average increase of 29.5%, however, this result was significantly inflated by Poland, and the exclusion of Poland results in an average decrease of 25.7% for this group.

The impact of changes to e-invoicing requirements. For the assessment of the impact of the SID on the effectiveness of tax control activities through the relaxation of e-invoicing requirements, the three groups described in Box 15 were analysed. **The results show that the relaxation of e-invoicing requirements did not have a significant effect on the value of detected VAT-related irregularities.** If there is any effect at all, it was relatively small and, therefore, hard to be isolated from the other factors. Among the 13 Member States for which data on the value of detected irregularities are available, Belgium is the only country where legal requirements regarding e-invoicing did not change (Group 0). In Group 1 (with moderate relaxations), the value of detected VAT-related irregularities increased, on average, by 7%, while Group 2 experienced an average increase by 36%. However, the higher value recorded by Group 2, which significantly relaxed their e-invoicing requirements, is inflated by Poland (see Box 17 below), and an exclusion of Poland leads to an average decrease of 3% in the value of detected irregularities.

With respect to the impact of e-invoicing requirements on the adjusted VAT Gap, the results suggest that the **improvement in VAT compliance is higher in countries that have relaxed their e-invoicing requirements**, although it remains similar regardless of whether the relaxation has been moderate or significant. As can be seen in Figure 52 below, the average change in the VAT Gap adjusted for external factors is significantly lower in those countries, which did not implement significant changes to their e-invoicing requirements, with an average decrease in VAT Gap of 3.8 p.p. Countries of Group 1, on the other hand, experienced a decrease of 7.1 p.p., on average, between 2012 and 2017. In Group 2, the average decrease is slightly lower, (6.4 p.p.).

Figure 52 – Change in VAT Gap adjusted for external factors and change of e-invoicing requirements (p.p.)

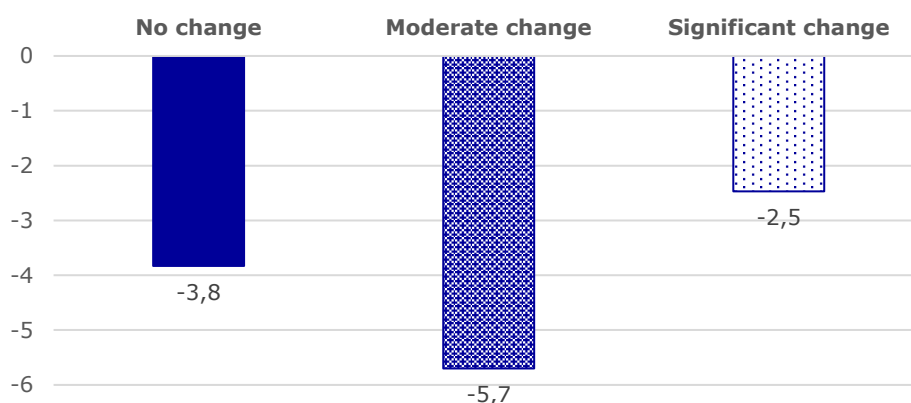


Source: Authors' elaboration based on the answers to the questionnaire for tax authorities and VAT Gap Study 2018.

However, **additional e-reporting requirements could have potentially influenced the decrease in the VAT Gap presented above**. Indeed, many countries that relaxed their e-invoicing requirements (Czech Republic, Hungary, Lithuania, Poland, Portugal, Romania and Slovakia) also introduced these additional requirements by 2016¹⁹⁸. Since there is only one country that introduced additional e-reporting requirements and did not relax the e-invoicing requirements (Estonia), it is very hard to isolate the effects of additional e-reporting requirements.

In order to get further insights on the effects of these two changes, the analysis considers the average change in the VAT Gap in the group of countries that relaxed their e-invoicing rules but did not introduce additional e-reporting requirements. There are nine such countries in the sample, i.e. Austria, Germany, Ireland, Greece, France, Italy¹⁹⁹, Luxembourg, the Netherlands, and Slovenia²⁰⁰.

Figure 53 – Change in VAT Gap adjusted for external factors and change of e-invoicing requirements in the subset of countries that did not introduce additional e-reporting requirements (p.p.)



Source: Authors' elaboration based on the answers to the questionnaire for tax authorities and VAT Gap Study 2018.

The average changes in the VAT Gap adjusted for external factors in the subset of Member States that did not introduce e-reporting requirements are significantly lower than in the full sample (as illustrated by Figure 52 and Figure 53). In case of countries that moderately relaxed their e-invoicing requirements, the

¹⁹⁸ Cf. Section 4.7.1.1.

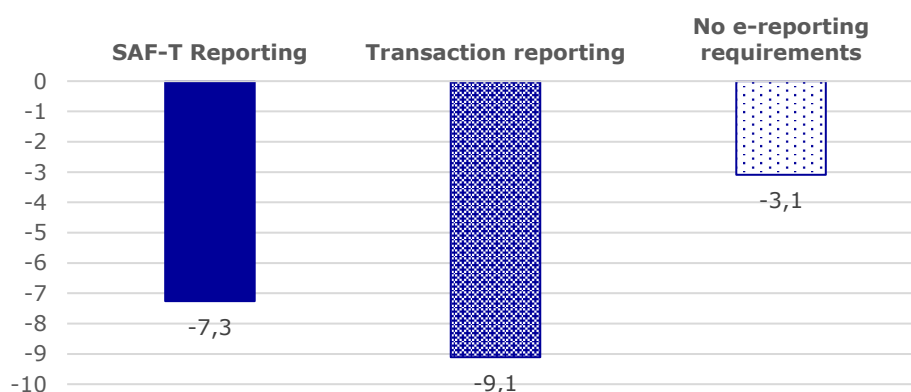
¹⁹⁹ Italy introduced electronic VAT listings in 2017 (*Spesometro*).

²⁰⁰ Two countries – Bulgaria and Spain – already had transaction reporting in place before the SID was introduced. These countries were excluded from the sample.

decrease in the adjusted VAT Gap is lower by 1.4 p.p. and, in the case of countries that significantly relaxed them, by 3.9 p.p.. Notably, the average decrease in the adjusted VAT Gap was by 1.4 p.p. smaller in the group of countries that significantly relaxed e-invoicing requirements than in those that did not change them. These results indicate the importance of the introduction of additional e-reporting requirements.

Finally, the effect of the additional e-reporting requirements on tax compliance was assessed by verifying whether and to what extent the introduction of these requirements affected the VAT Gap. Therefore, the average change in the VAT Gap adjusted for external factors is compared across three groups of countries, namely those that introduced either SAF-T Reporting or Transaction Reporting by 2016²⁰¹, and those that did not introduce similar, additional requirements. As indicated by Figure 54, **the reduction in the VAT Gap adjusted for external factors was more substantial in all Member States that introduced e-reporting requirements compared to the group of countries that did not introduce them**²⁰². In the 13 Member States that did not introduce additional e-reporting requirements before 2016, the VAT Gap adjusted for external factors has decreased on average by 3.1 p.p. per country. While it has decreased by 7.3 p.p., on average, for the three Member States with SAF-T reporting (Lithuania, Poland, and Portugal). The decrease among the countries with transaction reporting (Czech Republic, Estonia, Hungary, Romania, and Slovakia)²⁰³ is even higher, at 9.1 p.p., on average.

Figure 54 – Change in the VAT Gap adjusted for external factors in Member States which introduced additional reporting requirements (p.p.)



Source: Authors' elaboration based on the answers to the questionnaire for tax authorities and VAT Gap Study 2018.

Box 18 – MTIC and other specific types of frauds

As was already presented in the Relevance section²⁰⁴, information on the number and value of detected irregularities disaggregated per fraud type were submitted only by a limited number of Member States. The number of detected MTIC-type irregularities decreased in Austria, France, and Slovenia. Their value decreased significantly in France (from 21.2% to 1.1% of value of all detected irregularities) and increased slightly in Slovenia (from 3.6 to 5.4%). Because the data is very fragmentary, it is hard to draw any conclusions regarding the influence of SID on detection of MTIC and other types of fraud.

²⁰¹ Quasi-real time reporting had not been introduced by any country by 2016.

²⁰² Bulgaria and Latvia were removed from the sample because additional e-reporting requirements were introduced in these countries before the transposition of the SID.

²⁰³ Two countries – Bulgaria and Spain – introduced transaction reporting before the SID was introduced. These countries were excluded from the sample.

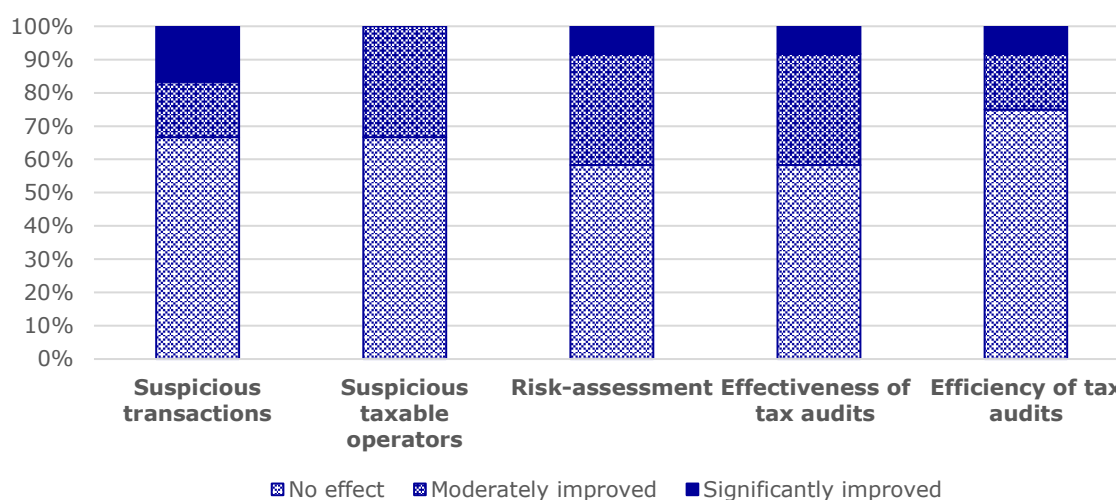
²⁰⁴ Cf. Section 4.6 above.

5.5.3 Stakeholders' perception of the role played by the Directive

In the targeted consultation, tax authorities were asked to express their opinion on **the role played by the SID when it comes to several aspects of tax control**, and namely: (i) the identification of suspicious transactions and taxable operators; (ii) the organisation of risk-management systems; and (iii) the effectiveness and efficiency of tax audits.

Only 12 tax authorities responded to this question, for two reasons. On one side, they reportedly could not disentangle the effect of the SID over the various dimensions listed above. On the other, as it emerged from the subsequent interactions, the Directive hardly had any effect on the work of tax authorities. Accordingly, across all the aspects, **the majority of tax authorities reported that no effect occurred because of the SID**. Finally, and consistently with the quantitative analysis above, in no case a negative impact was reported.

Figure 55 – Tax authorities' perception of the impact of the SID on tax control activities



Source: Targeted consultation.

Tax authorities and VAT practitioners were also asked to comment on the extent to which the **new norms on VAT chargeability of intra-EU transactions** improved the effectiveness of tax control activities, and, in particular, on whether they increased the number of intra-EU frauds detected, or the deterrence effect against fraudsters. **A majority of the respondents suggested that no or minor effects occurred in this respect**. The new provisions are considered as having increased only legal certainty for both tax authorities and economic operators, but to have hardly affected intra-EU fraud. Several stakeholders pointed out that the rules are by design unfit to achieve this result. Indeed, fraudsters would make sure to comply with any formal obligations, including the timing for issuing the invoice and VAT chargeability. At the same time, the new rules reportedly did not improve the timeliness and quality of the information exchanged on intra-EU trade. Again, the real game-changer in this respect would be the real time e-reporting of intra-EU transactions (*'as long as the invoice reporting is manual, chargeability date can't make a difference'*).

Box 19 – Methodological Appendix. Adjusted VAT Gap for estimating the effects of the SID on VAT non-compliance

As already mentioned, the VAT Gap is affected by many external factors. In order to assess the impact of the transposition of SID on VAT fraud, it needs to be adjusted for the impact of these factors. The input for the calculations was taken from the econometric model presented in the document "Study and Reports on the VAT Gap in the EU-28 Member States: 2018 Final Report" (TAXUD/2015/CC/131). The authors of this study investigated in-depth the possible factors influencing the level of VAT Gap. In order to do this, they developed

a fixed-effects panel data econometric model of VAT Gap. This kind of model allows for identification how changes in values of the explanatory variables over time influence the dependent variable. Additionally, it is robust to the possible existence of unobservable, time-invariant country-specific characteristics that influence the VAT Gap. Fixed effects estimator eliminates the influence of such omitted factors. As a result, estimations are driven by the changes in values of the explanatory variables over time, not by the permanent differences between countries. The authors included many external factors that could potentially have an impact on the VAT Gap, for example: structure of the economy, population, age structure of population, immigration, government effectiveness, expenditure on tax administration, expenditure on IT by the tax administration, budget deficit, GDP per capita and others.

After careful examination of this model, the decision was taken to consider the following factors:

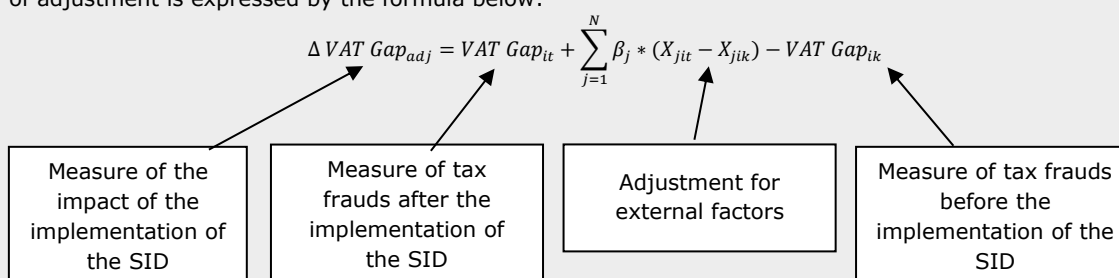
- Business cycle fluctuations / liquidity constrains, measured by the unemployment rate,
- Scale of the Tax Administration, measured by the ratio of administrative costs divided by GDP,
- Tax authorities' expenditure on IT, measured as a percentage of administrative costs.

Business cycle fluctuations influence the VAT Gap in at least two ways. Firstly, during economic slowdowns, companies have worse financial results and face stronger liquidity constrains, and therefore have a stronger incentives to avoid paying taxes. Secondly, VAT compliance tends to worsen during economic slowdowns due to higher number of bankruptcies. Theoretically, the best measure of business cycle fluctuations would be changes in the output gap. Unfortunately, output gap estimations are usually not sufficiently precise, especially for the most recent observations in the time series. Therefore, the unemployment rate was used as a proxy for the business cycle fluctuations.

Increase in VAT compliance could also be a result of a higher number of VAT-related tax controls. The Report analyses whether the uptake in e-invoicing allowed the tax authorities to perform more tax controls and contributed to reduction of the VAT Gap. However, the number of tax controls could have been influenced also by other changes, most importantly in the amount of resources devoted to tax control activities. In order to take this possible effect into account, the data on tax authorities' budgets from OECD database was used.

VAT compliance could also increase as a result of a higher efficiency of tax controls. The analysis investigates whether the implementation of risk analysis systems allowed the tax authorities to increase the efficiency of tax controls and contributed to reduction of the VAT frauds. However, the efficiency of tax controls could have been influenced also by other changes, for example in the resources devoted to IT technologies. In order to take this possible effect into account, the data on tax authorities' spending on IT (as a percentage of total budget) from OECD database was included in the model.

Estimations were later used to calculate the change in the VAT Gap adjusted for external factors. The purpose of this adjustment is to estimate what would be the value of the change in the VAT Gap if the values of the selected explanatory variables were the same as in a base year k (prior to implementation of the SID). Method of adjustment is expressed by the formula below:



For example, if VAT Gap in a country *i* was equal 8% in the year *t* and 10% in the year *k*, the only explanatory variables were unemployment rate (X_1) and TAs' budget (X_2), β_1 was equal 1.75 and β_2 was equal -0.08, unemployment year was by 2 p.p. higher than in the base year *k* and TAs' budget increased by 15% compared to the base year *k*, the value of change in the VAT Gap adjusted for external factors would be:

$$\Delta VAT\ Gap_{adj} = 8 + 1.75 * 2 - 0.08 * 15 - 10 = 0.3 \text{ [%]}$$

The estimated changes of the VAT Gap adjusted for external factors were used as a measure of the value of VAT frauds in the analysis of the impact of changes regarding VAT chargeability and e-invoicing introduced by the SID on the value of VAT frauds.

5.6 Summary of findings: Effectiveness

Since 2014 there has been a considerable growth in the uptake of e-invoicing in the EU. The average annual growth rate was estimated to be higher for unstructured e-invoices (8.8 p.p. for micro firms and 6.0 p.p. for larger firms) than in the case of structured e-invoices (about +4 p.p. for all size classes). In 2017, about 5 billion e-invoices have been estimated to be issued in the EU, 60% of which in an unstructured format, out of about 18 billion invoices in total.

The Directive **had a measurable impact in increasing the rate of adoption of unstructured e-invoices.** The simplification brought about by the Directive in a number of Member States, which had previously in place a number of more stringent e-invoicing requirements, fostered an amount of companies to switch from paper invoices to unstructured (PDF) e-invoices. The impact was felt more strongly across micro companies, as they were less equipped to deal with the pre-existing requirements. In this business segment, the Directive is considered as having generated about 30% of the growth in the uptake in the Member States in which it led to a significant relaxation of the regulatory requirements, and 15% in the Member States in which the relaxation was moderate. As for companies with more than 10 employees, the impact of the Directive is estimated at 10% and 5% of the increase, respectively. Differently, no significant role was played by the Directive in the uptake of structured e-invoices, as it does not distinguish nor promote this format, consistent with its technologically-neutral approach. **Other main drivers of the e-invoicing uptake** have been (i) **the behaviour of customers and suppliers**, that can either request or start accepting e-invoices, and (ii) in the case of structured e-invoices, **the imposition of an obligation to use e-invoicing in B2G transactions**, as it clearly emerges from its uptake in Spain and Italy.

The higher uptake of e-invoicing is the main driver of the reduction in administrative burdens attributed to the Directive. The issuance of a higher number of unstructured e-invoices is estimated to have generated about **EUR 920 million of cost savings over the 2015-2017 period**, and EUR 540 million in the last year. As for unstructured e-invoices received, the savings are much lower, at about EUR 6 million over the whole period. **The burdens saved due to the other provisions of the Directive are minor.** Only the provision on simplified invoices is estimated to have generated significant savings (EUR 38 million per year, or 114 over the total period in the seven fieldwork Member States). Rather, **the main impact of the other provisions was to increase the legal clarity of invoicing rules.**

The Directive contribution to the improved functioning of the Internal Market is positively assessed as far as the increase in the use of cross-border e-invoices is concerned. Indeed, while in 2014 e-invoices were comparatively less used in intra-EU transactions, in 2017 the number of intra-EU traders using this technology was in line with or slightly higher than the overall uptake. Such a catch-up was supported by the harmonisation brought about by the SID. With respect to the reduction of other regulatory barriers to cross-border transactions, the Directive has contributed to **an increase in the legal certainty for cross-border operators, which is well appreciated by stakeholders, but did not significantly reduce administrative burdens.** As for **the competitive conditions in the market for e-invoicing services**, they have moderately increased in certain market segments, but with a **limited, if any at all, effect on market prices and supplier's availability.**

As for the impact on SMEs, the Directive benefited smaller companies because of the burden reduction generated by the promotion of simple e-invoicing solutions. In this respect, the Directive role increasing the uptake, as discussed above,

was more significant for smaller than larger companies. However, the savings are proportional to the amount of invoices issued, and large companies issue a disproportionately larger number of invoices than small ones. As a consequence, **the administrative burden savings per SME remain modest, i.e. about EUR 110 over the whole period** (while they are of about EUR 120,000 for large enterprises). EU SMEs have also benefited from specific invoicing regimes amended by the Directive, i.e. simplified invoicing and cash accounting. As for the latter regime, the uptake remains very limited (except for Germany), but the Directive played a role in increasing the number of companies which could get access to it. Over the 2013-2017 period, about 60,000 additional micro enterprises are estimated to have opted for this regime thanks to the Directive. This resulted in a financial cost savings of about EUR 33 million, or EUR 550 per firm.

Finally, **as for tax control, there is no evidence of any significant impacts due to the Directive**. No positive effects could be statistically detected on tax control activities (e.g. the number or duration of VAT audits) or on VAT compliance, as measured by the adjusted VAT Gap. The opinions expressed by the tax authorities confirm that the effects of the SID when it comes to VAT compliance are, if any, rather limited. Importantly, however, **the simplification and harmonisation of invoicing and e-invoicing requirements brought about by the SID did not have a negative impact on tax control activities**, as evident from the data presented above, and confirmed by the opinions expressed by the tax authorities. In that respect, some impacts seem to emerge from the changes to e-invoicing rules, but they become negligible once another factor is accounted for in the analysis, that is the introduction of additional e-reporting requirements, which seemingly play a much more significant role in the fight against VAT fraud. The tax authorities stressed the importance of these new measures, wherever they have been applied.

6 EFFICIENCY

This section presents the analysis of the regulatory costs and cost savings generated by the Directive over the three following areas:

- 1) The **change in the administrative burdens generated by the provisions on e-invoicing** on the economic operators (in Section 6.1);
- 2) The **change in the administrative burdens and other regulatory costs generated by other invoicing provisions** on the economic operators (in Section 6.2); and
- 3) The **enforcement costs generated by the Directive** on the tax authorities (in Section 6.3).

As for the regulatory costs and cost savings for economic operators, the following **general considerations** apply throughout the subsequent analysis:

- 1) Except for the financial cost savings from cash accounting, **all the other regulatory costs and cost savings are of an administrative nature.** Invoicing is, in fact, a typical Information Obligation (IO), requiring companies to provide information to third parties – the trading partner –, store documents, and cooperate with audits, and does not impose substantive changes to a company's products or production process. As such, **the Directive did not affect substantive compliance costs.**
- 2) **All administrative costs and cost savings analysed are considered administrative burdens.** The cost savings concern additional or unnecessary activities, i.e. not those that would remain even in the absence of a regulatory obligation. For instance, the costs of issuing a paper invoice rather than e-invoice are additional to those imposed by the minimum compliance with the invoicing obligations. As for the few administrative costs analysed below, they invariably concern obligations that go beyond a company's normal activity, and, thus, the Business-as-Usual (BAU) factor is considered as 0%²⁰⁵.

6.1 Administrative burdens and savings: e-invoicing

As explained in Section 5.1 above, the **main effect of the Directive in terms of e-invoicing uptake has been a more common use of unstructured e-invoices.** This implies that, today, a larger number of companies issue and receive unstructured e-invoices compared to the situation prior to the Directive, and that, within each company, a larger share of invoices is issued / received in unstructured electronic form, since customers are more willing to accept it.

The Directive costs and cost savings for complying with two IOs – namely 'issuance of an unstructured e-invoice' and 'receipt of an unstructured e-invoice' – have been assessed based on the following steps: (i) the delineation of the invoicing process, to identify the specific administrative activities necessary to fulfil these IOs, (ii) the assessment of the number of additional invoices issued / received in electronic form (the population in the Standard Cost Model – SCM – jargon), (iii) calculation of the costs and cost savings associated to each additional e-invoice, and, thus, (iv) obtaining the total costs and savings. These were then discounted by the attribution factor described above²⁰⁶ to measure the impact of the Directive.

²⁰⁵ The BAU factor represents the share of costs that the company would bear even if the IO were removed; its complement represents the share of administrative burdens over the total administrative costs.

²⁰⁶ Cf. Section 5.1.3.

6.1.1 Issuance of an unstructured e-invoice

Description of the invoicing process. The *issuance of an invoice* requires a standard set of administrative activities which, in the case of an unstructured e-invoice, can be summarised as follows:

- 1) **Collection of customer and transaction data.** An invoice includes two sets of data: (i) the customer data, e.g. his/her name, address, VAT number where required; and (ii) the transaction data, e.g. the description of the goods/services provided, the taxable amount, the applicable VAT rate, exemption, or regime, the clauses that need to be mentioned, and the VAT due. Customer data may be already in the possession of the company (e.g. if data on existing customers are stored on a paper or electronic database, or when they had already been exchanged during the order phase), or may need to be retrieved from the customer (e.g. by asking directly, via filing in a paper or electronic form). The transaction data can already be known to the issuer, or can be retrieved internally, or from the tax advisor in case of non-routine transactions. Both customer and transaction data can be retrieved either automatically, e.g. if the company has an ERP system that draws from the company's internal databases, or manually by an accountant.
- 2) **Drafting the invoice.** This activity consists in inputting the data collected into the invoice. It can be carried out by hand, with the help of a non-dedicated software (such as a word processor or a spreadsheet), via a web portal, or automatically by means of an invoicing solution or an ERP module.
- 3) **Delivering the invoice** to the client. An unstructured e-invoice can be delivered by sending an email with an attached document (e.g. PDF) or with a web link from which the invoice can be downloaded, or by uploading the document into a web portal.

Population. For this IO, the population has been defined as *the number of invoices issued in unstructured electronic form*²⁰⁷. However, not all invoices generate the same administrative burden, as the costs, including personnel's time and out-of-pocket-expenses, vary depending on (i) the invoicing process adopted by the company, and (ii) the firm size²⁰⁸. For this reason, the population has been segmented in 16 groups, resulting from the combination of the following two criteria: (i) the *firm size*, that is micro, small, medium, and large enterprises; and (ii) the *invoicing process*, based on the prevalent solution adopted. Four invoicing process groups have been identified based on the evidence gathered for the business survey and the fieldwork, and are briefly described below:

- 1) **Basic invoicing.** These companies do not have an internal invoicing solution, and issue their invoices either by hand or via the help of a non-dedicated software (such as a word processor or a spreadsheet). The lack of an internal invoicing solution prevents any significant automation for retrieving and inputting the invoice data. The e-invoices are mainly delivered as PDFs attached to an email.

²⁰⁷ In line with previous studies, cf. Caggemini (2009), EU Project on Baseline Measurement and Reduction of Administrative Costs, Final Report, Measurement data and analysis as specified in the specific contract 5&6 on Modules 3&4 (hereinafter 'Caggemini Report 2009'); Administrative Simplification Agency ASA, Summary e-Invoicing methodology: Standard cost model parameter; KPMG (2006), Administrative Burdens – HMRC Measurement Project, Part 27: Value Added Tax (hereinafter 'HMRC Report'); ICF (2015), ABRplus study, Final Report for the European Commission (hereinafter 'ABRplus Study').

²⁰⁸ This finding is in line with the available literature; e.g. the Deloitte Report estimates that increasing the number of invoices by 50% increases overall invoicing costs less than proportionately, by 12-22%.

- 2) **Invoicing solution.** These companies have an internal invoicing solution, either a self-standing software or platform, or a module integrated in their ERP system. The solution can have various degrees of automation, including e.g. the retrieval of customer or transaction data from existing databases, and the delivery of the invoice. The delivery can either be automatic, e.g. in case the software automatically generates a PDF which is then sent via a web link or e-mail, or require manual intervention, e.g. if the invoice is saved in the company's archive and then transmitted by an accountant.
- 3) **Service providers.** These companies make use of an external service provider for some or most of the activities. Again, here the level of automation can vary significantly, including very basic solutions requiring the accountant to fill in an e-form (either software- or web-based), as well as automated solutions, fully integrated with the ERP system, which can generate and deliver the invoice automatically. The service provider can either be contracted by the issuer, or by its trading partner; companies using banks as e-invoice service providers are also included in this group.
- 4) **Mixed bag.** These companies use several of the solutions described above, i.e. have different invoicing processes, usually depending on the customer (e.g. basic for B2C, invoicing solution with PDF for B2B, and service providers for transactions with a single very large customer), or depending on the internal divisions (e.g. only departments issuing a large number of invoices adopted an automated solution).

The distribution of the above groups in the firm population varies with the number of invoices issued, and, thus, with the business size. However, the correlation is far from perfect, so that a small share of micro companies adopt dedicated invoicing solutions, and few large companies still rely on basic invoicing processes. Table 20 below shows the distribution for the population of companies that use e-invoicing in 2017 across the 16 segments.

Table 20 – Segmentation of companies using e-invoices, per invoicing process and business size (2017)

Size class	Basic invoicing	Invoicing solution	Service provider	Mixed bag	Total
Micro	64%	13%	21%	2%	100%
Small	31%	21%	41%	7%	100%
Medium	20%	21%	48%	11%	100%
Large	8%	26%	49%	17%	100%

Source: Authors' elaboration based on business survey and targeted consultation.

Cost per occurrence. Neither one-off nor recurrent costs are specifically incurred to issue an unstructured e-invoice, as the licensing cost of the software to draft the invoice, create a PDF file, as well as the internet connection can be regarded as part of a company's overall activity. The one-off costs for familiarizing with and adopting the BCAT option, being common to both the invoice issuance and receipt processes, are separately treated at the end of the present section.

Cost savings per occurrence. When an invoice is no longer issued on paper, but as an unstructured e-invoice, two savings are generated for the company:

- 1) **Personnel's time.** Based on the data obtained from the interviews with economic operators, the invoice form affects the time needed for its delivery, which is faster for unstructured e-invoices compared to the paper version. The very few large companies adopting a basic invoicing solution (8% of companies

in this size class) are the only exception, as, for them, using e- or paper invoices does not translate into any change in the time needed for the issuance process²⁰⁹. To the contrary, the time necessary for the retrieval of customer and transaction data and the drafting is largely equal for both paper and unstructured e-invoices, given the solution adopted²¹⁰. Savings in delivery time vary depending on both the solution adopted and the business size, and they are shown in Table 21 as the difference in minutes per invoice between paper and unstructured e-invoices, and converted in monetary values based on the average EU hourly salary of a clerk²¹¹. For companies using service providers, the saving is expressed in EUR per invoice²¹².

Table 21 – Personnel’s time savings per unstructured e-invoice and share of paper invoices sent via post, by size class and invoicing process

Size Class	Basic invoicing		Invoicing solution		Service provider		Mixed bag	
	minutes	EUR	minutes	EUR	minutes	EUR	minutes	EUR
Micro	0.5	0.25	1.5	0.74	*	0.65	0.7	0.33
Small	1.0	0.49	1.5	0.74	*	0.76	1.2	0.59
Medium	2.0	0.98	2.7	1.32	*	1.78	2.4	1.15
Large	0.0	0.00	4.5	2.21	*	2.32	3.5	1.70

Note: * for the segment 'service provider', the savings represent the difference between the monetary value of the time needed for issuing a paper invoice and the fee per invoice requested by service providers.

Source: Authors' elaboration based on targeted consultation.

- 2) **Postage and printing costs.** The e-invoices do not need to be printed, and hence companies save the printing and paper costs, which have been estimated at EUR 0.02 per invoice (each printed in two copies), based on average paper costs in the fieldwork Member States. Furthermore, a share of paper invoices is sent via post (other delivery modalities are at arm's length or including it in the good package). The share of invoices sent via post varies significantly across business sizes, most likely because of the type of activities undertaken (e.g. micro companies are more active in the B2C segment and the service sectors, where invoices can be directly given to the customer)²¹³. When an invoice which was previously sent via post is sent electronically, the company saves the postage costs, which have been estimated at EUR 0.70 per invoice, based on the average cost of a stamp for a regular email in the fieldwork Member States.

Comparing the saving estimates with those more recently discussed in the literature for the adoption of unstructured e-invoices, results are similar. A recent Belgian study estimated that switching to unstructured B2B e-invoices would save companies about EUR 2.8 per invoice²¹⁴, while an Italian study²¹⁵ suggested a value in the EUR 1.8-4 range. These values are compatible with the savings estimated in this

²⁰⁹ For these firms, typically issuing a volume of invoices much lower than the average large firm, the delivery of an unstructured e-invoice requires several manual activities (e.g. retrieving the invoice from the system, preparing the text of the email for the client, cross-checking the email and adding the e-signature), resulting into an amount of staff-time per invoice similar to the one required to deliver a paper invoice.

²¹⁰ The time for these activities can vary depending on whether the company adopted an invoicing solution or not, and its level of automation, but, given the business process, retrieving data and drafting the invoice takes the same amount of time for both paper and unstructured e-invoices.

²¹¹ Source: Eurostat Earning Statistics, latest edition (2014). In line with the SCM methodology, the salary includes 25% overheads.

²¹² For the segment 'service provider', the savings shown in Table 21 above represents the difference between the monetary value of the time needed for issuing a paper invoice and the fee per invoice requested by service providers.

²¹³ The estimated shares of paper invoices sent via posts are as follows: (i) 15% for micro; (ii) 50% for small; and (iii) 80% for medium and large companies.

²¹⁴ Poel, K. & Marneffe, W. & Vanlaer, W. (2016), Assessing the electronic invoicing potential for private sector firms in Belgium.

²¹⁵ Politecnico di Milano School of Management (2010), *La Fatturazione Elettronica in Italia: reportage dal campo - Rapporto 2010 Osservatorio Fatturazione Elettronica e Dematerializzazione*.

Study, which are up to EUR 3.2 per invoice. The savings estimated are also in line with what is suggested by certain economic operators, according to whom the savings due to switching from paper to PDF invoices amount to about 5-10% of the invoicing costs.

The model. The cost savings are generated by the Directive in two ways. First, because a higher number of companies have adopted unstructured e-invoices – the **additional population effect**. Secondly, because, within each company, the share of unstructured e-invoices has grown over the years, as more customers are willing to accept e-invoices – the **internal company effect**. Both types of savings have been measured for each of the 16 segments across the 2014-2017 period. **The year 2014 was taken as the baseline**, taking into account the transposition date of the Directive and one additional year for companies to become aware of the new legislation and implement changes to their business processes.

To measure the increase in the number of invoices, the following parameters have been considered:

- 1) The **share of companies using unstructured e-invoices** (U), per business size;
- 2) The **number of e-invoices issued by companies**, which results from the number of invoices issued by a company (N) multiplied by the average share of e-invoices issued (Sh);

The **number of EU companies per business size and invoicing process** (P), (W, shown in Table 20 and discussed in Box 20).

The general model formulation can be represented by the following equation:

$$U_s \times [N_s \times Sh_{s,p}] \times [P_s \times W_{s,p}]$$

where 's' shows the parameters that vary by business size, and 'p' shows the parameters that vary by invoicing process.

More in detail, to estimate the additional population effect, all elements were kept constant, and the increase in the uptake of unstructured e-invoices compared to 2014 was considered. To estimate the internal company effect, the increase in the share of e-invoices over the invoices issued was taken into account. The values for the variable for the years 2014-2016 were estimated backwards from the value for 2017 based on the growth in the uptake of unstructured invoices in the period 2014-2017.

The estimation of the cost savings generated by the Directive was obtained by applying the attribution factor (A, defined per Member State and size class). The equation thus becomes as follows:

Additional population effect: $\Delta U_s \times [N_s \times Sh_{s,p}] \times [P_s \times W_{s,p}] \times A_{s,MS}$

Internal company effect: $U_s \times [N_s \times \Delta Sh_{s,p}] \times [P_s \times W_{s,p}] \times A_{s,MS}$

Box 20 – The number of EU companies

For the calculation, the number of EU companies is considered as the most appropriate variable. This information is retrieved from Eurostat Structural Business Statistics and shown in Table 22 below. The choice of this variable may result in an underestimation of the number of businesses subject to this IO, since the statistical series, depending on national definitions, includes enterprises with 0 employees, but may not include other forms of self-employment. The decision to use Eurostat's number of companies was taken for a number of reasons:

- 1) **Data quality.** Eurostat's data are available for all Member States and for the entire period, while consolidated statistics on the number of VAT taxable persons including self-employed are scattered,

not homogeneous per class size, unavailable throughout the whole period, and may include a number of inactive taxable persons which would risk inflating the results.²¹⁶

- 2) **Existing literature.** Previous studies, including the Capgemini Report and the ABRplus study, made reference to '22 million taxable enterprises', thus in line with the approach adopted for this Study.
- 3) **Data collection.** The business survey coverage was limited to enterprises and did not include self-employed individuals.

This methodological assumption may thus reduce the number of firms benefiting from the higher uptake of e-invoice technologies, and thus the overall savings. However, it is to be pointed out that savings for micro companies are limited, and much lower than for larger entities, so that the inclusion of self-employed individuals is unlikely to alter the overall results.

Table 22 – Number of EU companies (2017)

	Number of EU companies
Micro	22,625,662
Small	1,478,478
Medium	238,185
SMEs	24,342,325
Large	47,526
Total	24,389,851

Source: Eurostat Structural Business Statistics.

Results. Total savings were estimated by multiplying the number of additional unstructured e-invoices compared to the baseline year by the saving per occurrence, per each segment. Results are shown in Table 23 below, per year and cumulated, as well as per firm size. **In 2017, estimated annual cost savings amounted to about EUR 500 million, while in the overall period the Directive is estimated to have generated almost EUR 920 million cost savings.**

Table 23 – Issuance of an unstructured e-invoice: Administrative burden savings (EUR million)

Size Class	2015	2016	2017	Cumulated
Micro	39	100	184	323
Small	9	21	35	66
Medium	15	34	58	107
Large	62	136	224	406
Total	125	292	501	917

Source: Authors' own elaboration.

In 2009, the European Commission estimated the total administrative burdens generated by the IO 'Invoicing'²¹⁷ at EU level at about EUR 9.1 billion per year. Thus, **the annual savings estimated for 2017 represent about 5.5% of the total administrative burdens.** That measurement, however, adopts a significantly different approach. In particular, it does not consider whether invoices are issued in paper or electronically, and aims at measuring only the 'VAT component' costs of invoicing, without providing further details on how invoicing issuance obligations are differentiated between VAT and other requirements.

²¹⁶ Cf. the Deloitte Report and Commission Staff Working Document, Impact Assessment Accompanying the document Proposal for a Council Directive amending Directive 2006/112/EC on the common system of value added tax as regards the special scheme for small enterprises, SWD(2018)9.

²¹⁷ Cf. Capgemini Report 2009.

6.1.2 Receipt of an unstructured e-invoice

Description of the invoicing process. The *receipt of an invoice* involves a standard set of administrative activities which, in the case of an unstructured e-invoice, can be summarised as follows:

- 1) **Invoice reception**, directly from the supplier or through a service provider. Unstructured e-invoices are commonly received as PDF documents, either attached to an email or downloaded from a web portal.
- 2) **Invoice data checking**. This activity consists in the formal verification of the invoice data, such as transaction data, date of issuance, VAT numbers, supplier and expense codes, as well as the material verification of its correctness, including checking and reconciling it against other business documents (e.g. purchase orders, transport documents). For unstructured e-invoices, this is done manually by the accountant, by retrieving the related documents and information either on paper or from the company's ERP software or databases.
- 3) **Invoice data entering**. This is done by manually inputting the invoice data into a company's financial records or ERP system, or extracting the data through an Optical Character Recognition (OCR)²¹⁸ technology integrated with the ERP.

Cost savings per occurrence. *The cost for receiving unstructured e-invoices is essentially equivalent to receiving paper ones*, as it requires a similar number of activities to be performed in a similar way, mostly manually. Consistently, the targeted consultations indicate no differences between the personnel's time needed to receive and process unstructured e-invoices and paper invoices. As for the invoice data entering activity, *the receipt of unstructured e-invoices can generate some time savings for firms adopting OCR solutions*. Indeed, paper invoices need to be physically scanned before being sent to the OCR software, and the data extracted in such a way often feature inaccuracies requiring a manual review. Differently, native PDF²¹⁹ invoices can be directly sent to the OCR software – thus saving scanning time – and the error rate in the data extraction is significantly lower²²⁰. Based on the data reported during the interviews, the additional amount of staff-time taken to scan/adjust paper invoices prior/after OCR data extraction is of about 2 minutes compared to unstructured e-invoices. Once converted in monetary values, based on the average EU hourly salary of a clerk, *the amount of cost savings has been assessed at EUR 0.98/invoice*.

Cost per occurrence. Based on the above analysis, the only relevant cost could concern the one-off investment in an OCR invoice processing solution. However, adopting an OCR is not a legal requirement, but a free business decision, and, thus, its costs cannot be attributed to the Directive. Furthermore, it should be considered that: (i) the company's decision to make a similar investment is determined by the overall volume of invoices received (irrespective if in paper form or unstructured format); and

²¹⁸ OCR technology allows software to interpret machine printed text on scanned images. Invoice Processing Software uses OCR technology and page layout analysis to automatically identify the common data elements in an invoice, such as vendor, date, amount, invoice number, line item data, etc. Invoice Processing applications are built using the same technology as data extraction applications, but have been specifically configured to recognize Invoices since they are one of the most common documents that companies need to automate.

²¹⁹ In case of paper invoices that have been scanned and turned into PDFs, capturing data from those images is considered less effective and typically requires some manual intervention.

²²⁰ Exception: Germany has come up with an interesting standard that looks set to overcome the challenge of extracting data from PDF e-invoices, allowing for straight-through processing. Named 'ZUGFeRD', the standard has been developed by the German Federal Ministry of Economics and Technology (BMWi), the Federal Ministry of the Interior, and BITKOM, the Federal Association for Information Technology, Telecommunications and New Media. 'ZUGFeRD' allows the embedding of XML-invoices into PDF format, based on PDF/A-3.

(ii) the same OCR equipment can be used to extract data from invoices, as well as other business documents.

Population. For this IO, the population has been defined as the **incremental number of invoices received in an unstructured electronic format by firms endowed with an OCR solution for invoice processing**. The assessment of this population, first, required the estimation of the share of businesses entering unstructured e-invoices by OCR into their payable system. This assessment is based on the following considerations and assumptions. First, the **adoption of an OCR invoice processing solution becomes justifiable only when a large volume of invoices is processed** (not lower than 1,000 invoices per month, according to some service providers). Accordingly, micro and small companies are excluded from the analysis, given their average volume of invoices received. To the contrary, the average large enterprise falls above this threshold, as well as a share of medium companies (which, on average, receive about 500 invoices per month). Coherently, among the economic operators interviewed, no single micro, small, or medium firm uses OCR technologies, differently from what was reported by a handful of large companies. Second, based on the business survey data, **the share of firms receiving e-invoices via both an internal invoicing solution and email was estimated at 7.5% and 11% for medium-sized and large enterprises**, respectively. As not all internal invoicing solutions include an OCR, these values were regarded as an upper bound. Their downward revision is based on the consideration that the adoption of an OCR is influenced by the **installation of an ERP system**, which is needed to achieve straight-through processing. Thus, the share of firms using an ERP system, based on Eurostat data was applied. As result, the share of relevant businesses was finally rounded up at **5% and 10% of medium and large companies, respectively**. These shares were then multiplied by the number of invoices received by a company and by the average share of unstructured e-invoices received to obtain the number of unstructured e-invoices concerned.

Table 24 – Share of businesses scanning unstructured e-invoices received with OCR, by firm size (2017)

Business size	Average volume of invoices received, 2017	Share of firms receiving e-invoices with an internal solution and via email	Share of firms who have ERP enterprise software package	Estimated share of the relevant population
Micro	391	-	-	-
Small	1,388	-	-	-
Medium	5,589	7.5%	57%	5%
Large	102,351	11%	76%	10%

Source: Authors' elaboration on Eurostat data, business survey and targeted consultation.

The model. As for the previous IO, savings are generated by the Directive in two ways. First, because a higher number of companies have adopted unstructured e-invoices – the additional population effect; secondly, because within each company, the share of unstructured e-invoices has grown over the years – the internal company effect. Both effects are discounted by the attribution factor, i.e. the change in the uptake of unstructured e-invoices attributable to the Directive.

Results. Total savings were estimated by multiplying the number of additional e-invoices received by medium and large companies adopting the OCR by the saving per occurrence, over the 2014-2017 period. Results are shown in Table 25 below, per year and cumulated, as well as per firm size. **In 2017, the estimated annual cost savings amounted to about EUR 3.4 million, while in the overall period the Directive is estimated to have generated about EUR 6 million savings.**

Table 25 – Receipt of an unstructured e-invoice: Administrative burden savings (EUR mn, 2014-2017)

	2015	2016	2017	Cumulated
Medium	0.1	0.3	0.6	1.0
Large	0.8	1.7	2.8	5.3
Total	0.9	2.1	3.4	6.4

Source: Authors' own elaboration.

The savings measured for this IO are much smaller than those estimated for the issuance, and even more so when confronted with the saving potentials estimated in the literature. The more limited savings compared with the active part of the invoice cycle depend on two factors. On the one side, for the vast majority of companies – i.e. all those without OCR – receiving a paper or unstructured e-invoice makes no difference in terms of the efficiency of the invoicing process. As long as there is no IT mechanism for automatically transferring the data from the PDF to the company's internal records, the manual validation and data entry require about the same personnel's time; the data from the targeted consultation consistently support this finding. On the other side, the population with an OCR is very limited and concentrated among medium and large companies, for which the Directive impact (e.g. the attribution factor) is lower than for micro enterprises.

The saving potential from the automation of the passive cycle of the invoicing process is significantly larger. The literature puts **the saving per invoice at EUR 5.5-9**²²¹. In relative terms, automated invoicing could save companies **between 60% and 80% of the total costs**, with most of estimates falling in the 60/70% range²²². However, **the bulk of them accrue only when structured e-invoices are received**. Indeed, this allows eliminating or automatizing almost all activities, such as the invoice data entry into the internal systems and the formal and substantial checks, thus increasing the efficiency of the invoicing process through internal system integration. This is confirmed by the findings from the targeted consultation. One very large company estimated that automatically-processable e-invoicing could save between **40% and 90% of the total invoicing cost**, the higher bound estimate requiring a fully automatic matching with the other business documents. As for micro companies, which mostly outsource invoice processing to a tax advisor, several Italian VAT practitioners estimate that the forthcoming obligation for B2B structured e-invoicing would save between **70% and 80% of the time that they spend for micro enterprises**.

6.1.3 Other considerations

The larger use of unstructured e-invoices fostered by the Directive has possibly affected two other administrative activities, common to both the active and passive invoicing cycle. Considerations on the actual relevance and as well as tentative estimates of the related costs and cost savings can be summarized as follows.

- 1) **BCAT familiarization and adoption.** In principle, the issuance / receipt of an unstructured e-invoice without an e-signature should be accompanied by the adoption of BCAT, considering that no other method to ensure I&A is commonly used by economic operators. Hence, the companies exchanging unsigned unstructured e-invoices would incur into administrative burdens generated by the following

²²¹ ASA Report 2014-2016.

²²² Koch, B. (Billentis) (2017), Invoicing / E-Billing – Significant market transition lies ahead; estimate 60-80%.

Euro Banking Association (EBA) (2010), E-invoicing 2010 – European market guide; estimate 50-90%. Hereinafter, 'EBA Report 2010'.

Seres (2015), *Estudio comparativo de uso de factura electrónica en España*; estimate 69%.

Ernst & Young (2014), *Livre blanc – Dématérialisation des factures fournisseurs*; estimate 66%.

activities: (i) familiarisation with the BCAT obligations; (ii) design of the business controls; and (iii) adjustment of the pre-existing internal systems and management procedures. In practice, as extensively reported in Section 4.2, the number of firms that have actually adopted the BCAT option and, thus, incurred these costs can be safely estimated as negligible. Indeed, (i) companies with more than 10 employees, when dealing with unstructured e-invoices, typically use e-signatures, while (ii) micro firms, even if required, do not adopt BCAT. The only exception to this picture is France, in which all taxpayers exchanging e-invoices without QES or via an EDI, or paper invoices, should adopt BCAT. More in detail, the French legislation requires companies to prepare a written document to illustrate the internal controls adopted, with the possible exclusion of micro companies. Based, on the information gathered from fieldwork, the French large companies have been increasingly setting up BCAT systems, incurring rather significant one-off costs, in the order to EUR 200,000 – 350,000, including the time-staff, if internally designed, and the external costs of technical support from e-invoicing service providers. Assuming full compliance with this legal obligation for French large firms, the total administrative burdens can be estimated in the order of about EUR 1.2 billion. However, the attribution of these costs to the Directive seems largely disputable. First and foremost, in France a different approach to the transposition of Article 233 was adopted, and the national legislation provides for a closed list of means to prove I&A, namely QES, EDI, or BCAT. Hence, these costs seem to be due to the national interpretation of the Directive provisions, rather than to the Directive itself. Accordingly, in no other Member State these costs were mentioned when discussing the burden of using unstructured e-invoices. Secondly, these costs arise invariably regardless of whether a French company uses paper or unsigned unstructured e-invoices, therefore, they are not generated from the decision to switch to e-invoices.

- 2) **Invoice archiving.** Archiving is an area which was eventually not affected by the Directive (despite the Commission proposal). Still, relevant cost savings could be attributed to the Directive, if the archiving of unstructured e-invoices emerges as less burdensome than for paper ones. This could be the case if the process is more efficient (i.e. archiving each invoice requires less personnel's time), or thanks to savings in paper management (which includes the setup of physical archives and the disposal of the invoices at the end of the storage period). **However, when archiving is done internally, the data from the targeted consultation show that there are no or negligible time savings between paper invoices and unstructured e-invoices across all size classes.** Only when the process is outsourced to an external service provider – either the company's tax advisor or a specialized enterprise – the archiving costs become lower. For micro companies, e-archiving can cost about 60% less on a per invoice basis; for large companies, the relative savings are lower (in the area of 25%), because overall costs decline more than proportionately when the number of invoices grow. However, the number of companies in our sample that use an e-archive service is too small to estimate the relevant population, and thus calculate the overall savings. This is also an indication that the overall savings are probably moderate, given the current diffusion of e-archiving technologies for e-invoices.

6.1.4 Summing up

The quantification of administrative burdens savings due to the higher uptake of unstructured e-invoices fostered by the Directive is shown in Table 26 below. Additional administrative burdens, which could be due to the implementation of BCAT, have not been attributed to the Directive. Additional savings arise for companies using e-archiving systems, and they are discussed qualitatively above.

Table 26 – Administrative burden savings: e-Invoicing

	2015	2016	2017	Cumulated
e-Invoice issuance	125	292	501	917
e-Invoice receipt	1	2	3	6
Total	126	294	504	924

Source: Authors' own elaboration.

The estimated savings are considerably lower than previous estimates of the savings achievable by e-invoicing, such as the EUR 18 billion assessed by the EU Baseline Measurement of Administrative Burdens Project²²³, and then quoted in the ABRplus study and by the High Level Group on Administrative Burdens²²⁴. The EUR 18 billion savings resulted from the reduction of burdens due to the IO 'VAT bookkeeping in sufficient detail for inspection by tax authorities', that includes the activities for reviewing and booking sale and purchase invoices, and keeping sale and purchase ledgers. This IO was estimated to generate about EUR 35 billion of administrative costs, of which about EUR 27 billion of burdens²²⁵. It was estimated that, if all companies switched to automatically-processable invoices, about half of these costs could be saved, because of the automatization of the bookkeeping process. Thus, **the EUR 18 billion figure was hypothetical, as it provided a maximum saving potential** if (i) all companies switched to e-invoicing; and (ii) only automatically-processable e-invoices were used. To the contrary, the estimates provided in this Study capture the savings which have actually occurred due to current uptake of unstructured (i.e. not automatically-processable) e-invoices; consequently, they are necessarily and significantly lower.

This Study indeed does not aim at capturing the saving potential of e-invoicing, but is to reflect the current state of the world – where the uptake of e-invoicing among EU companies is far from 100% - and the legislative provisions adopted in Article 217, which does neither mandate nor favour automatically-processable e-invoices over other formats. **The decision not to differentiate between structured and unstructured e-invoices was a conscious policy choice made by the Legislators.** This probably maximised the positive impact of the Directive on the uptake of e-invoices, since micro and small companies had no or very limited barriers in starting exchanging PDF documents, and saved the switching costs to structured e-invoicing. It could also be consistent with a piecemeal approach, in which, first, the diffusion of unstructured e-invoices is promoted by the SID, and, then, a first attempt at promoting structured invoices ensued via the Directive on public procurement and the associate standard. In any case, the **decision not to push for structured e-invoices clearly limited the burden reduction below its maximum potential.**

6.2 Administrative burdens and savings: Other provisions

6.2.1 Issuance of an invoice for cross-border transactions

The issuance of a cross-border invoice requires the same activities as for domestic invoices, but the invoicing process and the resulting document can be different from the domestic ones for three reasons:

- 1) **Business reasons.** These include, for instance, the possibility that it may be more cumbersome to retrieve customer data (e.g. because of language barriers),

²²³ Cf. Capgemini (2009), EU Project on Baseline Measurement and Reduction of Administrative Costs, Final Report incorporating Module 5.2 – Development of Reduction Recommendations.

²²⁴ Cf. i.a. High Level Group on Administrative Burdens, Case Study on ABRplus Item No. 8 "VAT - Suppressing additional requirements on invoices and enabling wider use of electronic invoicing".

²²⁵ Capgemini Report, at p. 68 and ff.

the lack of familiarity with certain data (e.g. the format of the address or the VAT number in another country), or the customer's request to receive an invoice in a language that he/she can understand (e.g. his/her mother tongue, or a third language such as English).

- 2) **Applicable VAT regimes.** Certain cross-border transactions are subject to specific VAT regimes (e.g. the VAT exemption for intra-Community supplies of goods, the reverse charge for cross-border B2B provision of services). The resulting invoice will have to reflect the applicable regime and include the clauses mandated by Article 226. Hence, even though the layout of the invoice may remain the same as for domestic transactions, its content may differ. For cross-border transactions, companies may also be required to perform a check on their customer, by verifying their VAT number on the VIES database.
- 3) **Specific invoicing rules.** Cross-border transactions are also subject to specific invoicing rules, which have been amended by the Directive. The changes include: (i) the new Article 219a, which now regulates the applicable national invoicing rules; and (ii) the uniform time limit for intra-EU transactions introduced in Article 223²²⁶.

Obviously, the difference between domestic and cross-border invoices due to business reasons do not generate costs or cost savings that can be attributed to the Directive, or to the VAT rules. As for the applicable VAT regimes, the cost and cost savings for complying with the revised Article 226 are considered. With respect to specific invoicing rules, the cost and cost savings due to the applicable invoicing regime and the uniform time limit for intra-EU transactions are taken into account in the analysis.

Article 226 – Invoice content. The Directive introduced a number of standard clauses for certain regimes applicable to cross-border transactions. In particular the clause 'reverse charge', applicable to most of the cross-border B2B provisions of services, can be used, removing the need to make reference to national or EU legal provisions. However, according to VAT practitioners and business stakeholders, ***the revised Article 226 did not result in either significant costs or savings for companies.*** For companies adopting internal invoicing solutions or using an ERP, such a change is usually directly implemented in the software by the provider. On the cost side, the adaption costs are included in the annual costs of this solution; on the saving side, this change did not affect the time needed for issuing an invoice. Some costs are incurred by very large companies designing their own internal invoicing solutions, but these are assessed as negligible. For companies adopting basic invoicing solutions, they have to familiarise with the legal change, but again this generates no costs. In terms of savings, they are also marginal, and basically linked to the possibility to use a simpler template (*'once you adapted your invoice template, the gain is over'*). Only in case a company enters in a non-routine transaction (e.g. has an occasional intra-EU sale), there could be a saving, as the company needs now to become familiar with a simpler formulation. However, this happens sporadically. When this obligation concerns a micro company, for which getting familiar with legal requirements can be more complex and costly, the information is likely retrieved from its tax advisor, and usually at no additional costs (i.e. it is covered by the overall fee).

Article 219a – Applicable invoicing rules. For this provision, the possible costs and cost savings were assessed, first, by identifying in how many cases companies complied and still comply with different requirements for cross-border invoices compared to

²²⁶ As described in the prioritisation shown in Section 2.2.1 above, other cross-border provisions were not considered as having generated any significant savings, based on the feedback of stakeholders and the local VAT practitioners.

domestic ones, and, then, by verifying whether this attitude changed since the implementation of the SID. If a company could start following domestic rules for certain cross-border transactions to which foreign rules applied, this would generate a saving, given that a company is more acquainted to its own domestic framework. In the opposite case, this would generate a cost. However, **the vast majority of companies (more than 85% of the respondents to the targeted consultation) do not issue different invoices for cross-border transactions**, except for the different content due to the applicable VAT regime. When differences exist, the need to adapt to the destination legal requirements was mentioned only by a minority of companies, and, in particular, by multinationals that, for internal policy, adapt invoicing rules across their various national subsidiaries. In most cases, the adoption of a different format for cross-border invoices is linked to business reasons and the customers' request. **The situation has not changed significantly since the introduction of the SID**, as very few companies used to comply with the invoicing requirements of the country of destination²²⁷. This is indeed consistent with the attitude of many tax authorities, which would have hardly, if ever, challenged an invoice only because it conformed to the rules of another EU country, provided that the necessary items were included. Additionally, few companies ever felt the need to acquire information on the invoicing rules in the destination market by means of an internal research or their tax advisors (two-thirds of companies never enquired); when they did so, either the costs were included in the tax advisor's fee, or the information could be retrieved at arm's length (e.g. by a quick exchange with the customer). Consequently, **no significant costs and savings have arisen from this measure**.

Article 222 – Uniform time limit for intra-EU transactions. None of the companies with cross-border activities reported any impact from the new provision on the time limit, the awareness of which was also limited. Since this provision hardly affected the companies' behaviour, it could generate no significant cost or cost savings. As anticipated in Section 5.3 above, two main explanations were provided. First and foremost, in most cases, invoices are issued as soon as possible, or at regular intervals which suit the internal business organisation. Secondly, when the time limit for domestic transactions are shorter, companies abide by it for all invoices, as this is simpler from a business perspective.

Summary of findings. For the issuance of a standard invoice for cross-border transactions, cost and savings due to the Directive have been assessed as negligible or absent. Few adaptation costs and negligible cost savings arose because of the new clauses included in Article 226. Similarly, the costs and savings linked to Article 219a are also negligible, either because companies would not use to adapt cross-border invoices to the requirements of the country of destination, or because, when they did so, the monetary value of the familiarisation burden was nihil or modest. Finally, the impact of the new time limit on company behaviour is estimated to be very limited, and thus this revision did not generate costs or cost savings. The impacts of these provisions are better captured in terms of legal clarity and the improved functioning of the Internal Market, as discussed in Section 5.3 above.

²²⁷ Also taking into account that the change is mostly relevant for the cross-border provisions of services, which represents a smaller share of intra-EU trade. The intra-EU provision of goods was, and still is, split, for VAT purposes, in two different transactions, with two corresponding invoices issued respectively by the supplier and the receiver according to their own national requirements.

6.2.2 Issuance of a simplified invoice

Compared to the analysis carried out in Section 6.1 above, the analysis of **the cost savings from the issuance of simplified invoices** is confronted with a poorer data availability; hence, the results are provided only for the seven fieldwork Member States²²⁸ for one year. The **main data limitations** are as follows:

- 1) First and foremost, **detailed information on the number of simplified invoices, or on the share of companies using them, is almost non-existent**. In Czech Republic, information on the taxable basis of simplified invoices could be retrieved, which is, however, of limited relevance to calculate the number of simplified invoices²²⁹. In Portugal, information is available on the number of B2C invoices (1.2 million in 2017), a large share of which could be simplified – however, no information is available on B2B simplified invoices. As a consequence, informed assumptions on the population of simplified invoices have been used, based on the qualitative feedback from business federations, VAT practitioners, and economic operators.
- 2) Secondly, the companies covered by the business survey and the targeted consultation were selected as to minimize the number of sectors which are predominantly B2C (e.g. retailers, restaurants, and providers of accommodation services), so that **the information on the cost parameters is very limited**. This data gap has been filled via the qualitative information provided by VAT practitioners and economic operators and a comparison with the data on the issuance of a standard invoice.

Considering the above limitations, here below the attribution factor, the estimated population (i.e. the number of simplified invoices), and the savings per occurrence are described, before providing an estimate of the total savings.

Attribution factor. The attribution factor depends on the extent to which the SID triggered a legal change in the national legislation. For the fieldwork Member States, the legal changes to the simplified invoicing regime can be summarised as follows:

- In **France**, the regime for simplified invoices was left untouched by the transposition of the SID, hence no savings can be attributed to it. The same is true for **Germany**, where the threshold was increased from EUR 150 to 250 only in 2015, i.e. about two years later than the transposition of the SID. Also for this country, no savings can be attributed to the Directive, as the existing norms already went beyond the minimum Directive requirements, and since the change did not happen as a consequence of its transposition.
- **Italy** had not introduced simplified invoices, and did so as a result of the Directive. Hence, 100% of the savings have been attributed to it. The same goes for **Romania**, in which simplified invoices did exist, but were subject to a Ministry authorization which had never been granted.
- In the **Netherlands, Poland, and Portugal**, simplified invoices existed, but were limited to specific sectors, or subject to lower thresholds. Here, the Directive did force Member States to extend the use to all sectors, at least for transactions below EUR 100. Hence, part of the savings has been attributed to it, depending on the pre-existing coverage, which is assessed as follows: (i) very high in the Netherlands (20% attribution factor)²³⁰; (ii) medium in Portugal (50%) and (iii) low in Poland (80%)

²²⁸ Germany, France, Italy, the Netherlands, Poland, Portugal, and Romania.

²²⁹ Between 20% and 21% of the overall tax basis for 2016 and 2017.

²³⁰ Dutch legislation already foresaw simplified invoices for the accommodation and restaurant sectors.

Population. The following analysis focuses on the five countries in which the attribution factor is not 0%. With respect to the company size, based on the information retrieved from the fieldwork, **simplified invoices are used almost exclusively by micro enterprises²³¹, and, in particular, by those issuing paper or basic e-invoices.** As soon as a micro company has an invoicing solution (or uses a service provider), the gains from reducing the information content of an invoice are very limited, so that it will likely issue standard invoices for all transactions. Based on the analysis of the e-invoicing uptake and the business segmentation based on the e-invoicing process carried out above, the population was set at 82% of the micro companies²³². The number of invoices was discounted by the share of cross-border invoices issued by micro enterprises (3.5%), since simplified invoicing can only be applied to domestic transactions²³³.

In the Netherlands, Portugal, and Romania, the use of simplified invoices is considered common in restaurants, and moderate in other sectors, such as retail trade and the provision of accommodation services, while it remains very limited in other industries. In line with this qualitative indication, it is assumed that **50% of invoices issued by restaurants and 20% by retailers and providers of accommodation services are simplified.** Finally, the use of simplified invoices is considered **marginal in Italy and Poland**, so that only 5% of the invoices issued in the three above-mentioned sectors are assumed to be simplified.

Costs per occurrence. Costs are of no relevance for this regime, since if an economic operator decides to switch to simplified invoices for some or all of his/her transactions, he/she only has to prepare a new template once, an activity which requires a negligible amount of time. For instance, the simplified invoice templates can be quickly retrieved from the web at no costs.

Savings per occurrence. *The savings per occurrence depend on how the Member States has implemented this invoicing regime*, and, in particular, if customer data are to be included in the simplified invoice or not. If this is not the case, as in the Netherlands and Portugal, the savings amount to 4.5 minutes per invoice, resulting from 3.5 minutes saved in retrieving customer data²³⁴, and 1 minute saved in drafting the invoice²³⁵. When customer data are requested, as in Italy, Poland, and Romania, the savings are of 1 minute per invoice. Savings have been monetized using the average salary rate of a clerk, as for the other IOs. The monetary value of savings, thus corresponds to **EUR 2.2 per invoice in high-saving countries, and EUR 0.5 in low-saving countries.**

Results. In the five fieldwork Member States in which the Directive caused a legal change to this invoicing regime, it is estimated that about 55 million simplified invoices have been issued in 2017. Of this, about **36 million of simplified invoices can be attributed to the Directive²³⁶.** Given the number of simplified invoices and the saving per occurrence, this translates into **about EUR 38 million burden savings.**

²³¹ The number of micro companies per country has been retrieved from Eurostat Structural Business Statistics.

²³² That is 49% using paper invoices, and 32% using basic e-invoicing solutions (difference due to rounding) - see Section 6.1 for the number of micro companies not using e-invoicing at all, and Table 20 above for the number of micro companies using a basic invoicing solution.

²³³ Cf. Section 4.3.3 above.

²³⁴ Based on the targeted consultation of micro-companies issuing paper or basic e-invoices.

²³⁵ Qualitative estimates of VAT practitioners and economic operators issuing simplified invoices.

²³⁶ Considering the national attribution factors described above.

Table 27 – Administrative burden savings: Simplified Invoices

MS	# of relevant micro firms	Share of simplified invoices	# of simplified invoices	Attribution factor	# of simplified invoices attributed to the Directive	Savings per occurrence (EUR/per invoice)	Savings (EUR mn)
IT	732,241	5%	12,118,408	100%	12,557,936	0.5	6.2
NL	145,608	Standard	13,362,348	20%	2,769,398	2.2	6.1
PL	268,197	5%	4,438,586	80%	3,679,657	0.5	1.8
PT	182,230	Standard	17,941,921	50%	9,296,332	2.2	20.5
RO	94,168	Standard	7,608,928	100%	7,884,899	0.5	3.9
Total	1,422,444		55,470,190	-	36,188,222	-	38.4

Note: Standard: 20% of invoices for retailers and providers of accommodation services; 50% for restaurants.

Source: Authors' own elaboration.

Scenario analysis. As illustrated above, the analysis was confronted with severe limitations on the available information on the uptake of simplified invoices. The identification of the sectors where simplified invoices are used was largely consistent across all interviewees and in all countries, but retrieving a more detailed estimate of the uptake was, at times, difficult. Hence, **a scenario analysis is provided below, by varying the uptake rate** as follows:

- 1) **Low-uptake scenario:** 10% of invoices in the retail and accommodation sectors are simplified invoices, 20% for restaurants. **Resulting savings amount to EUR 22 million.**
- 2) **High-uptake scenario:** 50% of invoices in the retail and accommodation sectors are simplified invoice, 80% for restaurants. **Resulting savings increase to EUR 70 million.**

6.2.3 Issuance of a self-billing invoice

The Directive intervened on self-billing by removing the possibility for Member States to impose additional requirements other than (i) the prior agreement; and (ii) the acceptance of the invoice²³⁷. **These requirements were a possible source of burdens for both domestic and cross-border transactions.** Seven countries had such requirements in place, such as the duty to notify the tax authority of the prior agreement, to ask for an authorisation, or to have the statement notarised, and in five of them they have been removed (Estonia, Hungary, Malta, Poland, and Romania).

The evidence gathered from two fieldwork Member States – Poland and Romania – indicates that the removal of the notification and the authorisation procedures only marginally reduced the administrative burdens. More specifically:

- In **Poland**, after the transposition of the SID, the obligation to notify a tax office was removed. Nowadays, the agreement of both parties can be done in any form and the tacit acceptance of self-billing invoices is allowed. While this has increased the interest of economic operators for this regime, **the costs of the prior notification were considered as marginal.**
- In **Romania**, before the SID, a prior agreement had to be notified to the tax authority. The notification consisted of a letter addressed to the tax authority, which had to be sent in paper form, together with a copy of the contract between the parties. In practice, this was not perceived as a major barrier to self-billing,

²³⁷ The requirement that the invoice is issued 'in the name and on behalf of the taxable person' may be imposed; however, this generates no additional costs or cost savings.

since the notification was just for information purposes and there was no compliance check by the receiving authority. **The procedure was a burden – it could take up to half a working day for its completion – but the number of companies concerned and the amount of prior agreements was limited.** One very large Romanian enterprise reported that it would sign between 10 and 30 prior agreements per year, so that the removal of the notification would correspond to a monetary saving between EUR 1,200 and 3,600 per year.

Overall, **the cost savings at aggregate level have been assessed as negligible** for three reasons: (i) the process did not change after the transposition of the SID, since most of the self-billing agreements are still entered in written form, even in countries where it is not mandatory; (ii) the geographical scope is limited (only five countries were concerned by the removal of the additional requirements); (iii) the number of companies entering in those agreements is very limited – mainly only very large manufacturing companies (e.g. in the automotive industries) or large networks of sale agents. The limited amount of savings was confirmed by the few stakeholders which had some direct experience with self-billing. No costs at all arise from the amended provision, as it only removed certain compliance activities.

6.2.4 Financial cost savings due to cash accounting

The financial cost savings arise because cash accounting taxpayers are not obliged to pay VAT before receiving the related payment from their customers, hence pre-financing costs do not occur. Such financial costs would, on the contrary, occur when the delay in payments is so long that the VAT becomes due before the payment is received²³⁸. More precisely, this is the case when the payment duration (that is the sum of the payment terms and delay) exceeds the timeframe given by law between the end of the VAT reporting period and the deadline for the VAT to be paid.

Out of the 22 Member States applying cash accounting for micro companies, **late payments pose a problem, so that payments may arrive after the VAT due date, in 15 countries** (as illustrated in Table 28 below). The ratio between the payment duration and the VAT payment period provides an indication of the share of transactions for which VAT becomes before the payment is received.

Table 28 – Average payment duration (in days) and estimate of share of transactions, for which VAT is due before payment is received, for B2B and B2G transactions (2018)

MS	B2B Duration	B2G Duration	B2B Share	B2G Share	MS	B2B Duration	B2G Duration	B2B Share	B2G Share
AT	24	29			LV	18	18		
BG	28	30			LU	35	42	22%	38%
HR	43	44	14%	16%	PL	33	33	27%	27%
CY	85	85	50%	49%	PT	65	76	22%	46%
EE	19	22		17%	RO	35	39	11%	20%
FI	25	25			SK	23	26		4%
DE	24	29		3%	SI	33	37	3%	11%
EL	40	57	11%	48%	ES	52	54	36%	40%
HU	26	30	7%	14%	SE	33	33		
IE	20	32		17%	UK	27	27		
IT	56	80	11%	64%					

Note:* Malta is missing due to no available data on payment times; Blue cells: Average payment duration shorter than VAT payment period.

Source: Author's analysis based on European Payment Report²³⁹ & EU VAT Compass.

²³⁸ The problem of payment delays has already been discussed in more detail in section 4.5 above.

²³⁹ Intrum Justitia (2014, 2015, 2016, 2017, 2018), European Payment Report.

When the payment duration is longer than the time granted for paying the VAT after the end of the tax period, the VAT taxable person has to pre-finance part of its VAT due, which can be done either through borrowing money from a bank at a certain interest rate, or using its own resources, and thus bearing the opportunity cost of capital²⁴⁰. The savings of these financial costs represent the cost savings attributable to the introduction of the cash accounting scheme.

Key considerations and assumptions. The following assumptions are made for the calculation:

- 1) **Transactions are assumed to be evenly spread across the time periods**, e.g. each month the micro company enters into transactions for 1/12th of its annual turnover.
- 2) **The average B2G payment duration was used as a proxy of payment duration**²⁴¹. During the targeted consultation, stakeholders mentioned that cash accounting is particularly used by micro enterprises dealing with the public sector, as, in most countries, public authorities take more time for paying than private customers. This is confirmed by data on payment duration, which shows that, in a vast majority of Member States, the payment duration in B2G transactions is longer than in B2B.
- 3) For all countries but Germany and Ireland, **the taxable person using cash accounting has to postpone the deduction of VAT**. It means that, in Germany and Ireland, a company saves the cost of financing the full VAT due, while, in the other Member States, the costs of financing the net VAT that is after VAT deduction, are saved.
- 4) **The financial costs of delayed payments with respect to the VAT due, and, hence, the benefits of cash accounting, arise in the first tax period**²⁴². In the following VAT periods, the payments received on overdue invoices compensate for the VAT that needs to be anticipated, thus netting out costs and benefits.

Cost parameters. Based on the above, the **annual cost savings per taxable person using cash accounting** have been calculated as follows:

- 1) The **VAT due per tax period** per micro company was calculated based on the average gross value added (turnover in Germany and Ireland)²⁴³, and the standard tax rate applicable in each Member State²⁴⁴.
- 2) To calculate the **amount of the VAT which is due before the payment is received**, the share of overdue transactions was calculated based on the ratio between the average payment duration and the time granted in each country for the payment of VAT²⁴⁵. This was then adjusted for the tax periods, i.e. the

²⁴⁰ As the opportunity cost of capital matches the interest rate for an equivalent loan, the way in which pre-financing is incurred does not affect the analysis of cost savings.

²⁴¹ Cf. Intrum Justitia (2014, 2015, 2016, 2017, 2018), European Payment Report.

²⁴² This is further confirmed by the estimated costs for the public budget. In Italy, where cash accounting was extended in 2012, the new regime was estimated to generate a cost for the public budget of about EUR 12 million for that year, and EUR 0.5 million for the following years.

²⁴³ The gross value added represents the difference between the production value and the inputs costs of a company. Both the gross value added and the turnover of micro-enterprises in each Member State are retrieved from Eurostat Structural Business Statistics.

²⁴⁴ European Commission – DG TAXUD (2018), VAT rates applied in Member States of the European Union. The standard rate is significantly higher than the effective VAT rate, i.e. the average rate taking into account of reductions and exemptions, which vary between 8% and 16% across the Member States (cf. VAT Gap Study 2018, at p. 13). However, the standard rate is used because cash accounting is more likely used by companies active in the B2G segment, in which the relative importance of VAT reduced/exempted transactions is lower.

²⁴⁵ VAT Compass.

- frequency per year at which micro companies have to pay their VAT²⁴⁶, to take into account that savings arise only in the first tax period.
- 3) The **cost savings per each micro company** were estimated by applying the appropriate interest rate²⁴⁷ to the amount of the VAT which is due before the payment is received.
 - 4) **Total cost savings** are calculated multiplying the saving per occurrence by the number of cash accounting taxable persons²⁴⁸.

Attribution. The attribution was based on whether and to what the extent the Directive led the Member States to change their national frameworks. The relevant legal changes include: (i) the introduction of the cash accounting; (ii) the increase of the threshold; and (iii) the extension of the scope to additional business sectors.

Among the 15 Member States in which payment delays are longer than the tax payment period, the following changes have been observed:

- 1) In Cyprus, Greece, Hungary, Romania, Slovakia, and Spain, the cash accounting scheme was newly introduced following the Directive. As the Article 167a made the cash accounting scheme more attractive for Member States and thus fostered its higher uptake, the entire share (100%) of savings has been attributed to the SID.
- 2) Ireland, Italy, and Luxembourg had a cash accounting regime in place before the Directive, but increased the threshold afterwards. The attribution factor has been calculated based on the relative increase of the threshold, namely 90% of savings have been attributed to the SID in Italy, 50% in Ireland, and 40% in Luxembourg.
- 3) An extension of the sectors eligible for cash accounting occurred in Portugal, for which the attribution factor was set at 90%, as the lifting of the sectoral limitations significantly increased the share of eligible micro enterprises.
- 4) Finally, the rules for the cash accounting scheme remained unchanged in Croatia, Estonia, Germany, Poland, and Slovenia, which were then excluded from the analysis.

Results. The financial cost savings generated through the cash accounting scheme that can be attributed to the Directive have been estimated at about EUR 33 million over the 2014-2017 period. This would correspond to about EUR 550 per each cash accounting taxable person. As there is no information on the annual uptake of the scheme, it is not possible to disentangle the annual benefits. These savings should be considered as a lower estimate, since they do not take into account the companies that may have used the cash accounting, but that have eventually opted out or closed before 2017. Besides, **additional cost savings could arise in specific circumstances, but cannot be assessed quantitatively**, as shown in the Box 21.

²⁴⁶ The frequency at which VAT has to be paid varies between Member States and generally depends on the size of the business entity, with a higher frequency for larger companies. The tax periods vary from monthly to yearly across Member States, but for micro enterprises quarterly payments of VAT are the norm in a vast majority of Member States.

²⁴⁷ The interest rate on revolving loans and overdrafts for non-financial corporations is applied, as retrieved from the ECB (MFI interest rates on new euro-denominated loans to euro area non-financial corporations – Revolving loans and overdrafts, as of August 2018). This may lead to an underestimation of the savings, since the data series concern all firm size, while micro enterprises are likely to face higher interest rates.

²⁴⁸ As estimated in Section 4.5 above.

Table 29 – Financial cost savings: Cash Accounting

MS	Share of delayed payments (B2G)	Avg. VAT due per company (EUR)	Avg. savings per company (EUR)	Attribution factor	Total savings (EUR '000)
CY	49%	7,493	491	100%	22
EL	48%	3,255	204	100%	155
ES	40%	9,454	415	100%	5,888
HU	14%	5,230	30	100%	582
IE	17%	113,742	867	50%	1,169
IT	64%	12,193	1,389	90%	25,005
LU	38%	27,874	1,091	40%	104
PT	46%	5,422	309	90%	251
RO	20%	4,510	49	100%	143
SK	4%	3,660	2	100%	1
Total	-	-	572	-	33,320

Source: Authors' own elaboration.

Box 21 – Cash-accounting: Additional unquantified costs savings

The calculation of the cost savings takes into account that the stream of revenues is constant over the time, and, as a consequence, the financial benefits of the cash accounting scheme fade out after the first tax period. However, if a taxable person does not have a steady stream of revenues, e.g. because it operates primarily with a seasonal focus, the **benefits of cash accounting would be recurring every year**.

Stakeholders also mention that the cash accounting regime plays an important **role in times of deteriorating payment conditions**, for example, during an economic crisis, as it reduces the financial risk for micro enterprises due to a sudden worsening of the payment durations.

Finally, opting for cash accounting can also **reduce the risk of bankruptcy** for those micro entities which rely on a small number of high-value transactions – especially with the public sector, which is, on average, a worst payer – and for which a single significantly delayed payment might pose a risk to financial stability.

Costs. The taxable persons opting for the cash accounting scheme have to bear additional costs, and this is considered as one of the factors hindering a higher uptake. These costs arise because the micro companies that could benefit from cash accounting are likely also to benefit from a simplification from the accountancy requirements, that is the possibility to account for revenues and costs on an accrual basis. Introducing VAT cash accounting means that the taxable persons needs to monitor payments, a task that he/she would not do otherwise. When the accountancy records are kept internally – that would be the case for the cash accounting taxable persons with a turnover coming close to the maximum threshold – this can be done at limited costs. When the accountancy duties are outsourced to an external tax advisor – as it is the case for most of the cash accounting taxable persons - this could increase the advisory fees. The interviews with tax advisors confirmed that this could be the case, although it depends on the specific national accounting regimes for micro companies and the market conditions.

In a recent report for the Commission²⁴⁹, the additional external costs for taxable persons using cash accounting are investigated, with data from two countries. In Italy, the advisory fees would be 40% higher, while in Romania there would be no difference. Conservatively assuming that the fees could be 10% higher when a company opts for cash accounting, and a normal fee of EUR 600/year²⁵⁰ for very small micro companies, this would represent **an additional cost of EUR 60 per year**, that is slightly more than 10% of the benefits estimated from the use of the cash accounting. Obviously, for reasons of economic rationality, all companies that opted for the scheme are assumed to receive positive net benefits from their choice.

²⁴⁹ Deloitte report, at p. 89.

²⁵⁰ Based on the information from the targeted consultation.

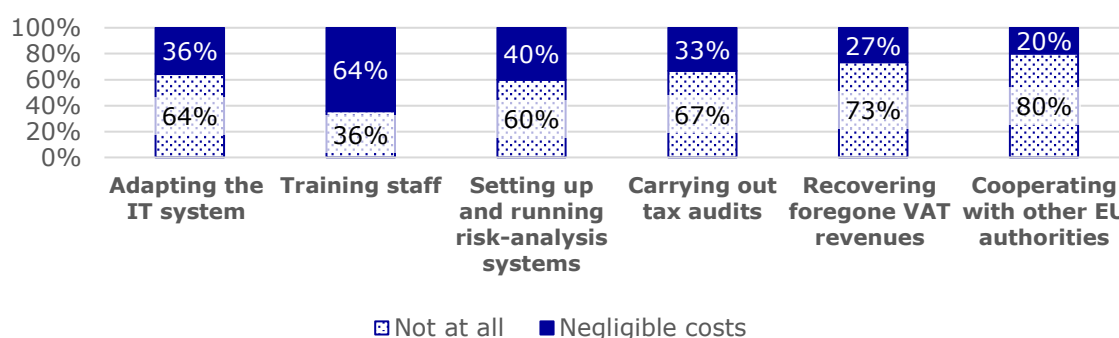
6.3 Regulatory costs and cost savings: tax authorities

The SID may have caused regulatory costs, namely enforcement costs, to tax authorities, which had to adapt to the new rules, and to enforce them on economic operators. These costs arise because of the need to train the personnel to the revised provisions, to buy IT equipment to verify e-invoices, or because of changes to the operational costs of conducting e.g. risk analysis or tax audits. The tax authorities were asked during the targeted consultation to estimate whether the costs related to the implementation, administration, and enforcement of the Directive were absent, negligible, or significant across a number of possible activities²⁵¹.

The tax authorities report that no significant costs emerged from the Directive.

Indeed, all tax authorities assessed the costs to be either non-existent or negligible for the various possible activities (see Figure 56). This is in line with the qualitative findings retrieved from the discussion in the fieldwork Member States, in which tax authorities signalled that the new rules mostly concerned economic operators and hardly affected the way in which tax control activities are organised, or the level of the associated effort. Even the larger diffusion of e-invoices did not significantly affect the costs of tax audit, because the tools and skills needed to read and process e-invoices were already largely in possession of the tax authorities.

Figure 56 – Tax authorities’ assessment of costs related to implementation, administration, and enforcement of the rules of the SID



Source: Targeted consultation

6.4 Summary of finding: Efficiency

The Directive proved capable of generating significant cost savings for economic operators from the increase in e-invoicing uptake, while the administrative burden reduction due to other measures and the financial savings due to cash accounting are limited. In total, **the cost savings for economic operators amount to about EUR 1.1 billion over the period 2015-2017.**

Table 30 – Cost savings generated by the Directive (EUR million)

	Type	2015	2016	2017	Cumulated
Issuance of unstructured e-invoices	Burden reduction	125	292	501	917
Receipt of unstructured e-invoices	Burden reduction	1	2	3	6
Simplified invoices*	Burden reduction	38	38	38	114
Cash accounting	Financial cost saving	n/a	n/a	n/a	33
Total	-	164	332	542	1,071

Note. *: for the 7 fieldwork Member States; n/a: not available

Source: Authors' own elaboration

²⁵¹ Namely: (i) adaptation of IT systems; (ii) training staff; (iii) setting up and running risk-analysis systems; (iv) carrying out tax audits; (v) recovering foregone VAT revenues; and (vi) cooperating with other EU authorities.

The bulk of savings arise from the wider issuance of unstructured e-invoices, which represent about 90% of the estimated effects, even when accounting that part of its more widespread use depends on factors other than the Directive. Other savings in the area of e-invoices include a small reduction of burdens due to invoice receipt for medium and large-sized companies equipped with an OCR (about EUR 6 million over the whole period) and the savings – treated qualitatively – for users of e-archiving services.

The other significant burden reduction concerns the wider use of simplified invoices following the SID, while the other provisions in the area of invoicing issuance and content – such as the revised Article 226, the revised provisions on applicable invoicing rules, the uniform time limit, and the harmonisation of self-billing – **were credited with a negligible saving effect**. Their main impact is better captured in terms of the increased legal certainty and an improved functioning of the Internal Market.

Very few additional costs have been caused by the Directive, so that the net impact can soundly be estimated as positive. The most significant cost concerns the requirement to setup and prove the BCAT option for large companies. However, as it depends on a specific national interpretation of this requirement, this is not attributed to the Directive. Other costs in the area of e-invoicing are considered as business-as-usual (e.g. the need for a company to possess a software to create PDFs or an internet connection). With respect to the familiarisation and the adjustments costs triggered by the revision of the simplified invoicing regime and other provisions in the area of invoicing issuance and content, all stakeholders consider them negligible.

Finally, **from the tax authorities' point of view, the net impact of the Directive can be assessed as nil**. Indeed, the lack of significant effects on the fight against VAT fraud and evasion (documented in the previous section) is paired by **the lack of significant additional enforcement costs**, which were assessed as absent or negligible by all authorities involved.

7 COHERENCE

This Section presents the analysis of the **external coherence** of the Directive, that is whether it is consistent with other EU policies and initiatives in the field of VAT and in adjacent areas, along the following three dimensions:

- 1) the compatibility of the Directive provisions with **other pieces of EU legislation** (in Section 7.1);
- 2) the inconsistencies and synergies of the Directive with **other EU initiatives aimed at supporting the adoption of e-invoicing** (in Section 7.2);
- 3) the alignment of the Directive objectives with **other EU strategies**, again primarily with reference to e-invoicing (in Section 7.3).

7.1 Coherence with other pieces of EU legislation

The consistency of the Directive was assessed with respect to **five EU legislative areas**, which were identified based on the stakeholders' feedback and desk research²⁵². The five EU legislative areas include:

- 1) **Accountancy rules**, and, in particular, the Accounting Directive²⁵³;
- 2) **Consumer protection rules**, such as the Directive on consumer rights²⁵⁴ and the unfair commercial practices Directive²⁵⁵;
- 3) **Rules on data protection**, namely the General Data Protection Regulation (GDPR)²⁵⁶;
- 4) The Directive on the use of **e-invoicing in public procurement**²⁵⁷;
- 5) The rules on **e-signatures**, namely the recent eIDAS Regulation²⁵⁸, and the **EDI Recommendation**²⁵⁹.

The first three legislative areas concern both invoicing and e-invoicing rules, while the norms on e-signatures, EDI, and on the use of e-invoicing in public procurement are relevant only for e-invoicing rules. For each of the above-listed areas, the various categories of stakeholders were asked whether they could identify or had experienced any inconsistency, overlap or duplicated burden and, if this was the case, to provide details on the problem encountered and its impact. The information retrieved was then supplemented by further desk research on the problems mentioned.

²⁵² In particular, stakeholders were asked to provide comments on these five areas and also to indicate other pieces of EU legislation or national norms that could create inconsistencies or synergies with the EU invoicing rules; however, no additional items were identified.

²⁵³ Directive 2013/34/EU of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC.

²⁵⁴ Directive 2011/83/EU of the European Parliament and of the Council on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council.

²⁵⁵ Directive 2005/29/EC of the European Parliament and of the Council concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council.

²⁵⁶ Regulation (EU) 2016/679 of the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

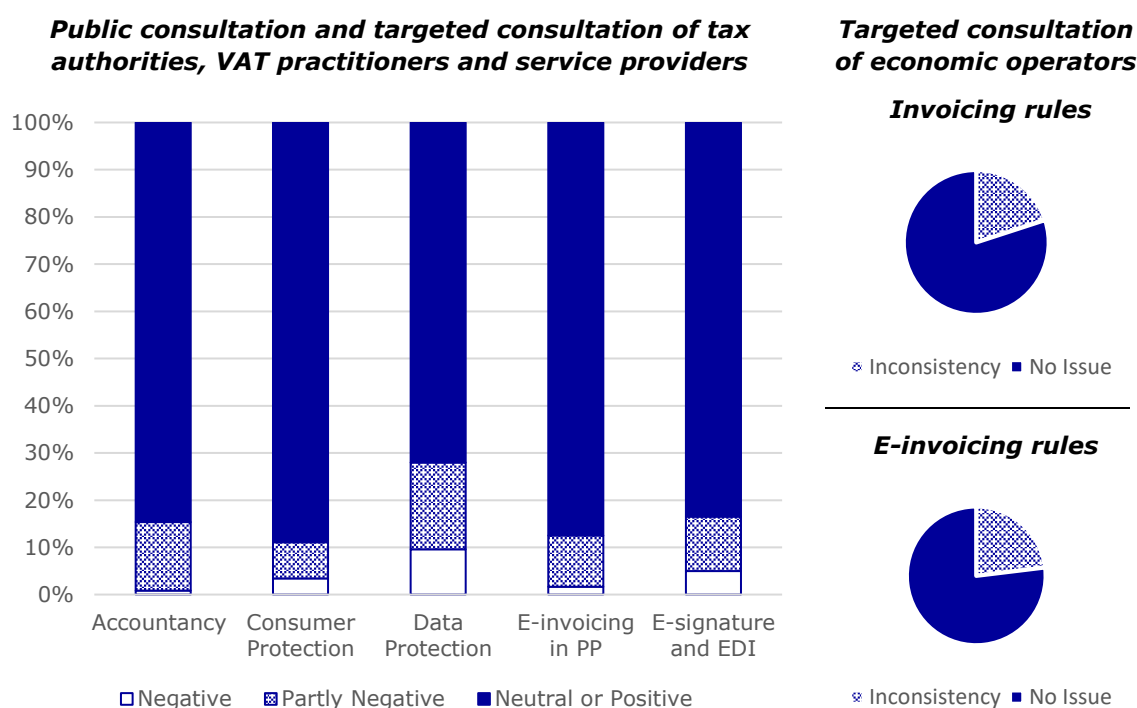
²⁵⁷ Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic invoicing in public procurement.

²⁵⁸ Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.

²⁵⁹ Commission Recommendation 94/820/EC of 19 October 1994 relating to the legal aspects of electronic data interchange.

Figure 57 below summarises the results of the public and targeted consultations. Across all categories of stakeholders, **the vast majority of interviewees did not point out or experience any inconsistency, overlap or duplicated burden**. For all the various legislative areas, three-quarters to four-fifths of stakeholders reported the lack of inconsistencies (i.e. a neutral or positive assessment) – up to 90% for consumer protection legislation. Economic operators were further asked during the targeted consultation whether they faced inconsistencies between the VAT invoicing rules and other legal requirements, and results were again largely positive. About a fifth of the respondents experienced some coherence issues; however, in most cases they concerned conflicts with national rules (e.g. GoBD in Germany or *e-fatura* in Portugal), thus highlighting, *a contrario*, the absence of negative interactions with the other EU legislation.

Figure 57 – Stakeholders’ assessment: Coherence



Source: Public and Targeted Consultations.

Finally, it is worth mentioning that **the CJEU has hardly ever been called to judge on the compatibility of the VAT invoicing rules with other pieces of EU legislation**. The only minor exceptions concern the relation – rather than the compatibility – with other acts imposing sectoral information obligations²⁶⁰. Also in these cases, no inconsistency emerged²⁶¹.

²⁶⁰ For instance, cf. C.78/12 Evita-K’ EOOD v Direktor na Direktsia ‘Obzhalvane i upravlenie na izpalnenieto’ – Sofia pri Tsentralno upravlenie na Natsionalnata agentsia za prihodite. In the case at hand, the referring court asked, i.a., whether Article 226(6) of the VAT Directive should be interpreted as requiring that, for supplies of cattle, the invoice should mandatorily include the ear tags of the animals, an aspect regulated by Regulation (EC) No 1760/2000 of the European Parliament and of the Council establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/97. The Court considered that Article 226(6) should not be interpreted as requiring that ear tags should be mentioned in the invoice.

²⁶¹ The bulk of CJEU jurisprudence on VAT invoicing rules indeed concerns the interpretation of Article 226 in connection with the right to VAT deduction, in particular the conflict between national norms and enforcement practices and the Directive provisions – as discussed in details above in Section 4.3.

The remainder of this section provides a detailed analysis across the legislative areas listed above, and discusses the problems emerged and their severity.

7.1.1 Accountancy rules

A VAT invoice is not only used to prove the right to deduction, but also for other purposes, first and foremost, to account for the revenues generated and costs incurred by an economic operator. In this light, the VAT invoice is also relevant for the application of and compliance with accountancy rules, and, more specifically, with those governing the preparation of the annual financial statements of revenues and losses.

Accountancy rules are regulated by national legislation, international rules – such as the IAS/IFRS standards – as well as by EU norms. In particular, the Accounting Directive aims at coordinating the national rules on financial statements²⁶². Such Directive never makes an explicit reference to invoices, invoicing rules, or the VAT legislation. In fact, it regulates the publication and the content of financial statements, while the rules on the supporting documents, including proofs of revenues and costs such as invoices, are largely left to the national legislator. Nevertheless, it remains crucial that compatible rules apply to invoices, when used as documents to prove the right to deduction or to compute revenues and costs.

The view of stakeholders on the compatibility of accountancy and VAT invoicing rules is positive, with 70% or more of them suggesting that no conflict exists²⁶³. However, a number of ***practical issues*** have been mentioned during the targeted consultation, as summarised below.

The probatory value of an e-invoice. The VAT legislation clearly establishes the legal value of an e-invoice, and makes clear that, subject to the requirements on I&A, it should be treated equally to a paper invoice. However, the same principle was not uniformly and immediately replicated under the accountancy rules. In particular, a few stakeholders voiced the concern that, until recently, an e-invoice would have had a lower probatory value for accounting purposes (or in courts, for civil litigation), up to not being accepted as a probatory means for certain controversies. However, they also acknowledged that the problem is less and less relevant, given the increased use of e-invoices, specifically, and e-documents, in general, and the steady change in enforcement and judiciary practices. For instance, in Portugal, this problem has been solved about three years ago, following the transposition of the SID, and e-documents are now accepted for bookkeeping purposes.

VAT chargeability. For supplies of goods and services, the chargeable event occurs, and the VAT becomes chargeable when the goods or the services are supplied²⁶⁴. As the definition of when a good or service is supplied is based on general commercial law principles, which are valid both for VAT and accountancy purposes, this generates no conflict between the two legislative areas. However, this is not valid for intra-EU supplies and acquisitions, which become chargeable on the date of the invoice or, at the latest, on the 15th day of the following month²⁶⁵. This means that, in certain cases (for instance, when the transaction takes place in one month, and the VAT becomes chargeable in the following one), transactions could have to be recorded when they are effected under the accountancy rules, and when they become chargeable under VAT rules. This may, in turn, create problems if different currency conversion rates have to be applied. However,

²⁶² Directive 2013/34/EU, in Article 1(1).

²⁶³ Data from the targeted consultation.

²⁶⁴ VAT Directive, Article 63.

²⁶⁵ VAT Directive, Article 67.

in practice, as discussed above, this has not created significant problems for operators, because (i) invoices are generally issued when the transaction takes place or shortly thereafter, and (ii) most companies follow the chargeability rules applicable to domestic transactions. As a result, an actual discrepancy between the time at which the transaction must be registered under accounting rules and the time of the VAT chargeability is likely to arise only in a very limited number of cases.

Financial lease. On financial lease, an international accounting principle (IFRS 16) has been recently approved²⁶⁶; it states that, for accounting purposes, the rented good becomes an asset of the lessee. This principle may affect the classification of financial leasing transactions for VAT purposes. In particular, if the rented good becomes an asset of the lessee, it could be considered that a financial lease corresponds, in terms of VAT transactions, to a sale of goods on deferred terms or the hire of goods for a certain period²⁶⁷. For this type of transactions, the VAT has to be charged when the goods are made available from the supplier, and not based on the periods to which the successive payments occur²⁶⁸. The current interpretations of financial lease consider that the VAT becomes chargeable on the payments of the lease, which are performed over time. The situation is yet uncertain, and it is not yet clear whether and to what extent the IFRS principle can affect the VAT treatment of this transaction.

7.1.2 Consumer protection rules

VAT invoicing rules and consumer protection rules can only have a limited interaction, and such a small overlap do not create obstacles or uncertainty for economic operators or tax authorities²⁶⁹. Indeed, almost all stakeholders expressed the view that no coherence issue exists between the two sets of rules. This is further corroborated by the recent Fitness Check on consumer legislation; for the coherence analysis, VAT rules were not even among the pieces of legislation considered by the European Commission report²⁷⁰.

The main reason for the limited interaction is that **the scope of the two legislative areas is mostly non-overlapping**. Indeed, consumer protection rules apply to B2C transactions only, explicitly excluding the purchase of goods and services for the buyer's trade, business, craft, or profession. For the vast majority of these transactions, a VAT invoice is not required, the main exception being cross-border sales of goods, regulated by Article 33 of the VAT Directive²⁷¹.

Like the VAT invoicing rules, the consumer protection legislation also imposes **information requirements** on the seller, e.g. pieces of information that must be provided to the consumer. Some of these information requirements partly overlap with those envisaged by Article 226 of the VAT Directive. For instance, both the unfair commercial practices Directive and the Directive on consumer rights require that, prior to the conclusion of certain transactions, the seller provides information, among other, on the main characteristics of the product/service sold, his/her trading name and

²⁶⁶ The principle will come into force as of January 2019.

²⁶⁷ VAT Directive, Article 14(2)(b).

²⁶⁸ As required by Article 64(1) of the VAT Directive.

²⁶⁹ Targeted consultation data (95% of stakeholders expressed a positive or neutral assessment).

²⁷⁰ Commission Staff Working Document, Report of the Fitness Check on Consumer Protection legislation, SWD(2017)209.

²⁷¹ Namely, supply of goods with transport, when transport ends in a country different from the one in which it started. For these supplies of goods, a VAT invoice is required for all transactions, including both B2B and B2C ones (cf. Article 220(1)(2)).

address, and the price inclusive of taxes²⁷². Other requirements are additional compared to the VAT obligations, as they ensure that the consumer is provided with the information required to exercise his/her rights (e.g. the complaint handling policy, or the procedure for returning the goods under certain circumstances). The VAT invoice, supplemented with all the additional information for consumers, can be the medium through which this information is provided²⁷³. If this was the case, the invoice would have to include all the information required by Article 226 of the VAT Directive, as well as those prescribed by consumer protection legislation for the specific transaction²⁷⁴. In any event, **no conflict between the two sets of requirements arises, as the lists of information to be provided do not contradict each other.**

Box 22 – France: Commercial document for the provision of services

A specific situation was discussed in France, where a 'note', i.e. a commercial document, must be issued for the provision of services with a value of EUR 25 or more. When the services are not provided to a taxable person or a legal person, a VAT invoice is not required for these transactions²⁷⁵. This note must include some of the information required by the VAT or consumer protection rules, namely the date of the document, the name and address of the supplier, the name of the customer, the date and place of the transaction, the tax base, and the total price²⁷⁶. When the transaction falls within the scope of the consumer protection legislation, the note can also include the information necessary to exercise consumers' rights, albeit the trader can choose a different medium. When the transaction falls within the scope of the VAT Directive as well, a note is no longer sufficient, and a proper (full or simplified) VAT invoice shall be issued. Both the national legislation and the EU Directives are clear in identifying which document with which information is to be issued in each case, so that no problem of coherence could be found. However, the existence of different documents and information requirements for similar transactions may create uncertainty across economic operators, especially those which are mostly active in the B2B market, and only occasionally venture into the B2C segment.

7.1.3 Data protection rules

The consistency of the VAT invoicing provisions with the rules on data protection, and, in particular, GDPR is a source of issues, albeit mostly potential, among stakeholders. Indeed, about a quarter of the interviewees²⁷⁷ consider that the GDPR may have a negative interaction with the VAT invoicing rules, the highest share across the various legislative areas. Two main reasons explain this perception: on one side, the wide definition of personal data, which can include, in some cases, the information included in an invoice; on the other, the very recent coming into force of the GDPR – right during the fieldwork activities for the present Study, i.e. in May 2018, so that economic operators still fear that issues may arise, while existing doubts have not yet been clarified. Here below, a number of potential conflicts are discussed, together with an assessment of their likelihood and magnitude.

Invoice data as personal data. The GDPR ensures the protection of personal data related to natural persons with respect to their processing, including handling and storage²⁷⁸. The definition of personal data includes 'any information relating to an identified or identifiable natural person'²⁷⁹. While, in principle, most of the information

²⁷² Cf. Article 7(4) of the unfair commercial practices Directive; and Articles 5(1) and 6(1) of the Directive on consumer rights.

²⁷³ In certain cases, such as for off-premises or distance transactions, the information must be provided on a durable medium; otherwise, they can also be provided by other means (orally, or by affixing information in the shop).

²⁷⁴ However, the information required for consumer protection purposes usually exceed the usual size of an invoice, especially for distance or off-premises transactions.

²⁷⁵ FR VAT legislation: *Code des Impôts*, Article 289(1).

²⁷⁶ *Arrêté* 83-50/A of 3 October 1983, as amended by *Arrêté* of 15 July 2010, BO CCRF 9 September.

²⁷⁷ Data from the targeted consultation.

²⁷⁸ GDPR, Articles 1 and 2.

²⁷⁹ GDPR, Article 4(1).

included in an invoice refers to legal persons, i.e. the economic operators, and thus falls outside of the scope of GDPR, personal data can also be included, such as the name of a 'contact person'. Even when this is the case, the processing and storage of invoice data is mandated by the VAT Directive, and it can be thus presumed lawful in force of Article 6(c) of the GDPR, which allows taxable persons to handle data when it is 'necessary for compliance with a legal obligation to which [they] are subject'. Most of the economic operators and VAT practitioners seem unaware of the risk, or, in line with the above interpretation, consider that including personal data in invoices poses no problem with respect to GDPR – as long as it is not sensitive data, such as medical information²⁸⁰. Providers of e-invoicing services are aware of the risk, but remain divided as to whether the yet-to-occur enforcement by national data protection supervisors would challenge the storage and processing of invoice data, and in which cases. **If certain invoice fields were considered as personal data, the impact for both economic operators and e-invoice service providers would be significant**, as it would require restructuring the invoice processing architecture and, most likely, would lead to the exclusion of any personal information in the invoice.

Box 23 – Tax Identification Number in invoices: the case of Romania

Specific concerns were expressed by Romanian stakeholders about the inclusion of the customers' Tax Identification Number (TIN) in invoices. This is not required by Romanian legislation, but it is reportedly a common practice when economic operators want an additional warrantee about the identity of the trading partner. It is also used by providers of e-invoicing services as the customers' unique identifier. Several Romanian companies, based on legal opinions they had received, became wary or stopped including TIN in invoices. This has created problems, especially for providers of e-invoicing services which rely on this identifier. At the same time, neither the tax authority nor the local data protection supervisor have yet expressed their opinion on this issue, thus the uncertainty among stakeholders remains unaddressed.

Data subject's rights. Under the GDPR, the natural persons to which the data relate enjoy certain rights, such as the right to rectification (Article 16) and the right to erasure (Article 17). However, Article 233 of the VAT Directive mandates that the integrity of the invoice shall be maintained throughout the storage period, hence the exercise of the above rights by the data subject could risk breaching the integrity requirement. The GDPR provides that these rights could be derogated in force of EU or national law, on ground of general public interest, including taxation matters²⁸¹. Hence, it can be expected that, should the conflict emerge, economic operators and providers of e-invoicing services could make use of this derogation and avoid conflicts with integrity requirements. It is, however, unclear whether a specific legal derogation should also be granted at EU or national level – some stakeholders would indeed welcome the latter to be on the safe side.

Storage period. Since storage of invoices is mandatory because of the VAT Directive and the national norms, it is also lawful from a GDPR perspective. However, this also implies that, when the national storage period expires, invoices containing personal data should be destroyed, since their conservation is no longer necessary for complying with a legal obligation. This problem could indeed be solved by obtaining the data subject's consent to process and store his/her data included in the invoice. However, this may be difficult in practice, as it would not be the trading partners expressing consent, but individually each person (e.g. employees) mentioned in the invoice. To avoid any data protection risk, companies and service providers may have to delete invoices once the storage period is elapsed, even though they may want to keep it for business reasons. It is unclear whether this will be the case, especially considering that the minimum

²⁸⁰ Listed in Article 9 of GDPR.

²⁸¹ GDPR, Article 23.e.

storage period for VAT invoices is of five years, and thus any problem may occur as of May 2023 only.

7.1.4 Rules on e-signatures and EDI

As already discussed, the Directive makes an explicit reference to e-signatures and EDI as example methods to ensure I&A, and quotes the pieces of EU legislation in which these methods are regulated. As a consequence, the substantive norms of these acts can affect compliance with the Directive.

E-signatures. E-signatures are regulated by the eIDAS Regulation, which replaced the e-signature Directive²⁸². The eIDAS Regulation aims at establishing common rules for the Internal Market for electronic trust services, by ensuring their recognition and workability across borders. It provides norms for (i) the certification authority, i.e. the entity issuing the certificate; (ii) the secure signature certification devices (e.g. the smart card, token or software that creates the signature); as well as (iii) specific services, such as e-signatures, e-seals, time stamping, and registered e-delivery services.

With respect to I&A requirements, two services are specifically relevant: (i) the e-signatures, which are explicitly mentioned in the Directive, and (ii) the e-seals. While both services can be used to certify the author and the integrity of an electronic document, the e-signatures also attest the willingness of an individual (and thus can be used, for instance, to sign e-contracts). Different types of e-signatures and e-seals can be used, namely: (i) 'basic', a technologically neutral service which is defined only through general requirements in the eIDAS Regulation; (ii) 'advanced', which is based on public key infrastructures; and (iii) 'qualified', based on certification devices. Only the latter are explicitly mentioned in Article 233 of the Directive, while the previous version of the VAT Directive referred to advanced e-signatures.

The eIDAS Regulation grants certain legal effects to the e-signatures and the e-seals. E-signatures are admissible in court and QES shall be treated equally to handwritten signatures; furthermore, QES, unlike the basic and advanced ones, shall be mutually recognised across countries. E-seals are admissible in courts, treated equally to paper-based certification and, most relevant for e-invoicing, provide users with a presumption of integrity and correctness of the sealed data.

The more advanced regulatory framework introduced by eIDAS for e-signatures and other trust services are generally considered as a way to promote their more widespread use, including for e-invoicing purposes. Accordingly, more than 75% of tax authorities, VAT practitioners and e-invoice service providers claimed, during the targeted consultation, that ***no issue of coherence exists between the eIDAS Regulation and the VAT invoicing rules***. One tax authority did mention that since e-seals could be used to prove the I&A of invoices, Article 233 should be updated accordingly. However, this inconsistency has not caused problems so far, as e-signatures represent by far the most common technology used. Another tax authority mentioned that a lack of coherence had emerged, since their national VAT provisions were not in line with the eIDAS Regulation; however, this has been solved by amending the national legislation²⁸³.

²⁸² Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures.

²⁸³ One e-invoice service provider did point out to one practical issue concerning eIDAS regulation, that is the limited number of certified producers of Hardware Security Modules, which qualified trust service providers

EDI. EDI systems are defined and regulated in a Commission Recommendation dating back to 1994, which is referenced in Article 233 of the VAT Directive. While this piece of soft law is almost twenty-five years old, ***it does not create problems in terms of up-to-dateness or inconsistencies with the amended invoicing rules.*** The fitness of the EDI Recommendation has been explained by a number of stakeholders because it is a light and technologically neutral document, which still provides a basic definition, and thus legal certainty, without having constrained the evolution of this technological solution. This positive assessment is also likely to be fostered by the freedom to accept different solutions for e-invoicing, in general, and for EDI, more specifically. Still, currently, the vast majority of the Member States (19) require the use of EDI to be based on an 'interchange agreement', as suggested by the Commission Recommendation.

7.1.5 Directive on the use of e-invoicing in public procurement

Already from its name, the Directive on the use of e-invoicing in public procurement is the piece of EU legislation bearing the closest relation with the VAT e-invoicing rules. This is straightforwardly acknowledged in Article 9 of the former, where it is explicitly stated that '*[t]his Directive is without prejudice to the provisions of Directive 2006/112/EC*', as to prevent possible conflicts. The relation is also detailed in the Recital 37, where it is clarified that the Directive 2014/55/EU pursues '*a different objective*' than the VAT Directive, and therefore '*it does not affect the provisions on the use of e-invoices for VAT purposes*'. In particular – the Recital continues – on one side, the use of e-invoices remains subject to the acceptance of the receiver, as established in Article 232 of the VAT Directive; on the other, Member States may impose on public authorities an obligation to accept e-invoices only (as also stated in Recital 35).

According to the Directive 2014/55, it will be mandatory for all public entities to receive and process e-invoices complying with the European standard (EN 16931) by April, 2019, i.e. 18 months after the publication of the standard in the Official Journal of the European Union²⁸⁴. As illustrated in the Relevance Section, an increasing number of Member States (13) went further, by requiring that public entities accept only e-invoices, the format of which can be based on the European standard required by the Directive, as well as on other national or international formats.

The most relevant difference between the VAT Directive and the one at stake is the ***divergent e-invoice definition*** adopted. While the VAT Directive defines an e-invoice as an invoice which (i) includes the information prescribed; and (ii) is issued and received in any electronic format²⁸⁵, Directive 2014/55/EU adopts a narrower definition. In particular, an e-invoice is defined as an invoice which is '*issued, transmitted and received in a structured electronic format which allows for its automatic and electronic processing*'²⁸⁶. The joint effect of the two provisions means that, on one side, an unstructured e-invoice (e.g. a PDF transmitted via e-mail) remains a valid e-invoice for VAT purposes; on the other, public authorities must be capable to accept structured e-invoices as well.

must possess to ensure the safety of the users' keys. However, this cannot be considered as an inconsistency between the VAT rules and the eIDAS Regulation, and is not preventing e-signature technologies from being commonly deployed for invoicing purposes.

²⁸⁴ Cf. Article 7 of the Directive 2014/55/EU. With regard to their sub-central contracting authorities and contracting entities, Member States may postpone the application until April 18th 2020, i.e. 30 months after publication of the reference of the European standard on electronic invoicing.

²⁸⁵ Article 217 of the VAT Directive.

²⁸⁶ Article 2(1) of the Directive 2014/55/EU.

Notwithstanding the different definitions, in the practice, ***the two norms are not in contradiction – as they are servicing different purposes – and, hence, they did not create any legal uncertainty about whether and when a certain document should be considered an e-invoice.*** In the words of a tax authority, “VAT provisions remain untouched by the different legal definition of Directive 2014/55/EU, and thus the latter creates no issues”. Such an absence of inconsistencies represents indeed the prevalent opinion across stakeholders.

However, as the distance between the two definitions is significant, this prompts certain stakeholders to suggest that the most recent one, i.e. that of Directive 2014/55/EU, is more up-to-date and better fit to the objectives of the SID. This view, however, remains in the minority. Expectedly, stakeholders pointing out to the out-of-dateness of the VAT Directive definition can be more commonly found among the most technology-savvy operators (e.g. very large companies or providers of e-invoicing services) and in countries which have already introduced mandatory B2G e-invoicing.

A very limited number of stakeholders, on the opposite side, consider that the provisions on e-invoicing in public procurement go beyond the VAT Directive, in particular, because the possibility granted to Member States to mandate B2G e-invoicing would contradict the parties’ freedom enshrined in Article 232. However, the Article does guarantee the recipient’s freedom to refuse e-invoices, but is silent about the possibility for the recipient to demand that invoices shall be received only in a specific format.

The Directive on the use of e-invoicing in public procurement attracted other comments about its implementation, which are, however, unrelated to its coherence with the VAT invoicing rules. In Germany, many stakeholders reported that it is still unclear which format(s) will be accepted by public authorities, as both the *ZugFerd* and *X-Rechnung* ones are currently being considered²⁸⁷. Some economic operators fear that, eventually, the choice will not be univocal, so that authorities or Länder may opt for different formats, a decision which would increase the costs and complexity for firms. In Romania, one stakeholder commented that the lack of information about how the Directive will be implemented, and, in particular, the technical arrangements for the transmission of e-invoices and their formats, is creating legal uncertainty for economic operators.

7.2 Coherence with other EU initiatives in the field of e-invoicing

A number of non-legislative initiatives have been deployed by the EU to support the application and enforcement of the VAT e-invoicing rules, as well as to promote the uptake of this technology across economic operators, and its interoperability. Based on the review of the EU actions in this area, three initiatives have been retained for assessing the synergies and inconsistencies with the Directive. Two initiatives, the European Multi-Stakeholder Forum on Electronic Invoicing (EMSFEI) and *Fiscalis*, aim at creating a common knowledge and sharing of best practices, thus facilitating the harmonisation of rules and the adoption of e-invoicing. The former concerns both private operators and public authorities, while the latter concerns tax authorities only. The third initiative is the work carried out by the European Committee for Standardization (CEN) for the creation of an EU-wide e-invoice semantic data model.

The assessment is based on both the targeted consultation and desk research. As for the former, questions on the coherence of these initiatives with e-invoicing rules were

²⁸⁷ The conflict seemingly arose because while the *ZugFerd* format is both human- and machine-readable, one Land required that the B2G invoice shall be machine-readable only, as it would be the case for *X-Rechnung*. However, a final decision has not yet been made on the matter.

asked to tax authorities and service providers, which were the only stakeholder groups that could have directly participated, or be indirectly knowledgeable.

7.2.1 European Multi-Stakeholder Forum on Electronic Invoicing

The EMSFEI was established by the European Commission in 2011, by bringing together representatives of national e-invoicing fora and other relevant stakeholders at EU level. It aims at exchanging national experiences and best practices on e-invoicing and supporting the identification of measures to facilitate its adoption across borders. The Forum first term lasted from 2011 and 2013, and was then followed by a second term between 2014 and 2017. The third term has started in late 2017. Since its launch, the Forum has turned out as a key resource for exchanging data and best practices, as well as for collecting, compiling, and publishing information on the e-invoicing uptake, regimes, and barriers in each EU country.

A number of EMSFEI contributions were conducive to clarifying the national implementation and application of the Directive provisions. These include, in particular, the 2013 study on the Directive implementation and the remaining cross border issues²⁸⁸, and the 2017 follow-up on implementation and regulatory issues²⁸⁹. Furthermore, the EMSFEI cooperated with Eurostat to refine and expand the questions on the uptake of e-invoicing technologies included in the 'Community survey on ICT usage in enterprises', which remains the main source for estimating this phenomenon. Thus, it effectively supported the ongoing measurement of the progress towards the achievement of a key objective of the Directive.

In line with these findings, the targeted consultation showed that the **stakeholders have a positive opinion of EMSFEI**. The quasi-unanimous view of the interviewees is that the EMSFEI positively or very positively contributed to the implementation and application of the VAT Directive e-invoicing rules. No critiques have been raised concerning its interaction with the existing rules.

7.2.2 Fiscalis Programme

The Fiscalis programmes are a series of multiannual action programmes aimed at supporting the implementation of the EU fiscal policy. The current programme, Fiscalis 2020, covers the period 2013-2020²⁹⁰. Its general objective consists of improving the functioning of the taxation systems in the Internal Market, in particular, by enhancing cooperation between the participating countries, their tax authorities and their officials. This is achieved by supporting the exchange of fiscal information, the administrative cooperation, and the capacity of tax authorities²⁹¹.

The Fiscalis 2020 programme aims at supporting three types of actions: (i) communication systems for the electronic exchange of information across tax authorities, which absorb the bulk of the programme budget; (ii) joint actions; and (iii) common training activities²⁹². Joint actions are commonly used to exchange best

²⁸⁸ EMSFEI (2013), Solutions for Remaining Cross-Border Issues.

²⁸⁹ EMSFEI (2017), Activity Group on Regulatory Issues, Final Draft report.

²⁹⁰ The legal framework is provided by the Regulation (EU) No 1286/2013 of the European Parliament and of the Council establishing an action programme to improve the operation of taxation systems in the European Union for the period 2014-2020 (Fiscalis 2020) and repealing Decision No 1482/2007/EC.

²⁹¹ Cf. Oxford Economics *et al.*, Mid-term evaluation of the Fiscalis 2020 programme, Report for the European Commission, 2018.

²⁹² Cf. Article 7 of the Regulation 1286/2013.

practices, create expertise, and bring together public officials from different Member States, also in the field of VAT²⁹³.

Only a very limited number of joint actions were mainly and directly concerned with e-invoicing rules, namely six out of the about 1,100 actions financed so far by *Fiscalis 2020*²⁹⁴. All the e-invoicing joint actions consist of working visits, in particular, to countries whose national policies for e-invoicing go beyond what is strictly required by the VAT norms (e.g. Italy for B2G, or Portugal for *e-fatura*). **The limited relevance of *Fiscalis 2020* actions for e-invoicing was indeed confirmed by tax authorities during the interviews**. In any case, none of those who did have some experience consider that the *Fiscalis* actions were not supportive of or conflicting with the VAT e-invoicing policies²⁹⁵.

7.2.3 European Committee for Standardization

The CEN started working on a European standard for e-invoices following the adoption of the Directive on the use of e-invoicing in public procurement. This act indeed mandates CEN to: (i) draft a European standard for the semantic data model of the core elements of an e-invoice; (ii) provide a list with a limited number of syntaxes complying with this standard; and (iii) test the standard. The standard had to comply with a number of requirements listed in the Directive, including it being consistent with the VAT Directive²⁹⁶. To fulfil this request, the Technical Committee 434 was established in September 2014²⁹⁷. The Technical Committee drafted and tested a European standard and a list of syntaxes, which were then published in the Official Journal in October, 2017²⁹⁸.

The prescription for the standard to be consistent with the VAT Directive is considered as met²⁹⁹. Indeed, an extensive effort was made to ensure that all mandatory legal elements (at EU and national level) were or could be incorporated in the invoice model. All stakeholders confirmed this, so that the use of standard-compliant e-invoices will not conflict with the application of the VAT rules.

In line with this finding, **the vast majority of stakeholders consider that the work of CEN positively or very positively interacted with the Directive**. In particular, the standard developed is considered as an opportunity to foster the interoperability of the e-invoice formats, and thus to overcome the cross-border technical barriers that still exist. More in detail, it will help preventing that national e-invoicing systems, especially (but not only) for B2G transactions, create 'walled gardens' in which the operability for operators established in other Member States is considerably more difficult compared to domestic suppliers.

Even though the assessment remains positive, **two critiques** were raised by stakeholders. On one side, the **CEN standard came too late**, in a moment in which

²⁹³ Oxford Economics *et al.*, *supra* note 291.

²⁹⁴ Based on the title of the action financed. Other joint actions in the field of VAT are likely to have touched upon e-invoicing issues, even though they were not primarily aimed at sharing information or best practices on e-invoicing.

²⁹⁵ E-invoicing service providers could not comment on this aspect, as none of them was aware of the role of the *Fiscalis* programme, which is indeed targeted to tax officials only.

²⁹⁶ Article 3 of Directive 2014/55/EU.

²⁹⁷ Commission Implementing Decision C(2014)7912 on a standardisation request to the European standardisation organisations as regards a European standard on electronic invoicing and a set of ancillary standardisation deliverables pursuant to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.

²⁹⁸ Commission Implementing Decision (EU) 2017/1870 on the publication of the reference of the European standard on electronic invoicing and the list of its syntaxes pursuant to Directive 2014/55/EU of the European Parliament and of the Council.

²⁹⁹ As confirmed by Recital 5 of the Commission Implementing Decision 2017/1870.

national or EU initiatives (e.g. PEPPOL) had already been deployed. While the existing international standards, models and projects had been taken into account in drafting the standards, compatibility problems may emerge in countries in which certain formats had already been established. Indeed, one tax authority pointed out that the EU model is not fully compatible with the national one, and this did and would entail additional costs to establish compatibility. It was, nevertheless, acknowledged that the level of compatibility between the national format and the EU standard was high, thus indirectly confirming that existing formats had been taken into account. Another critique concerned the **publication of the standard, which is for sale rather than freely available**. This is, however, common practice for all European standards.

7.3 Coherence with other EU strategies

The degree of alignment of the Directive with other EU strategies was assessed by evaluating the consistency of their respective objectives. Based on the analysis of EU policies, the three following strategies were found to deal – albeit sometimes only tangentially – with the theme of e-invoicing:

- 1) The **Single Market Strategy**;
- 2) The **Digital Single Market Strategy**;
- 3) The **Single Europe Payments Area** (SEPA).

The analysis was primarily carried out based on desk work, by comparing the objectives of the Directive, and the policy documents explaining the EU strategies. To the contrary, stakeholders could not provide feedback on this, as they did not prove sufficiently knowledgeable about the interaction between e-invoicing rules and the three aforementioned strategies.

7.3.1 The Single Market strategy

The Single Market strategy is an EU overarching policy, which provides the general direction for the Internal Market policies, as well as a framework for coordinating an array of other sectoral policies (e.g. for energy, trade, capital markets). Its main aim is to revive and modernise the EU Single Market, so to improve its functioning. This is achieved by intervening in three specific areas, which correspond to the strategy's specific objectives:

- 1) creating opportunities for consumers, professionals and businesses;
- 2) encouraging and enabling the modernisation of and innovation in the EU;
- 3) ensuring that the Single Market benefits consumers and businesses in their daily lives.

The Single Market strategy, even when dealing with the VAT, does not make an explicit reference to invoicing rules. However, **one of the general objectives of the Directive – which is to contribute to the proper functioning of the Internal Market – is directly relevant and aligned** with the general objective of this strategy. Furthermore, the Directive also contributes to two of the strategy's specific objectives, and namely:

- **Creating opportunities for businesses, and, in particular, SMEs.** The strategy acknowledges that the complexity of the VAT regulation is one of the obstacles that

SMEs face when operating cross-border³⁰⁰. The strategy then lays down the Commission's plan to tackle this aspect, and, in particular, the VAT SME package³⁰¹ and the e-commerce revision³⁰². While invoicing rules are not among the barriers explicitly listed, the simplification and harmonisation brought forward by the SID, and the role that it played in increasing the uptake of e-invoices are indeed aligned with the strategy's objective to reduce obstacles for SMEs in the Internal Market. Furthermore, the newly introduced Article 167a on cash accounting also goes in the direction of favouring SMEs.

- **Encouraging and enabling innovation.** One of the areas in which the Commission intends to intervene to achieve this objective is public procurement, and, in particular, the collection and analysis of procurement data³⁰³. A more widespread use of e-invoices in B2G transactions is a key enabler for the availability and use of public procurement data. The SID is aligned with this objective, even though the major role in this field rests with Directive 2014/55.

7.3.2 Digital Single Market Strategy

The Digital Single Market Strategy³⁰⁴ is one of the sectoral policies of the European Commission. It covers the so-called Information and Communication Technology sectors, i.e. any economic activity related to the Internet, the digital technologies, and the communication networks. The Digital Single Market Strategy specifically aims at ensuring that *'individuals and businesses can seamlessly access and exercise online activities under conditions of fair competition, and a high level of consumer and personal data protection, irrespective of their nationality or place of residence'*³⁰⁵.

The strategy does not explicitly mention e-invoicing rules and policies. At the same time, e-invoicing was, and still is, capable of contributing to the interventions spurred by the strategy. In particular, the first pillar of the strategy aims at ensuring *'better access for consumers and businesses'* to the single Market, ensuring the removal of *'key differences between the online and offline worlds'* and the lowering of *'barriers to cross-border online activities'*³⁰⁶. This is aligned to two of the specific objectives of the SID, namely the simplification and harmonisation of e-invoicing rules. In particular, the equal treatment mandated by the SID for paper and e-invoices matches very well the need to reduce differences in how business is conducted online or offline.

The creation of a simpler and more harmonised framework for e-invoicing also contributes to the second pillar of the strategy, which aims at ensuring *'the right conditions for digital networks and services to flourish'*, *'supported by the right regulatory conditions'*. In this respect, the amended rules on e-invoicing introduced by the SID were regarded as positive step towards the reduction of the barriers to entry in other EU countries for e-invoicing service providers, which, notwithstanding the

³⁰⁰ Communication from the Commission on Upgrading the Single Market: more opportunities for people and business, SWD(2015) 202 final, 203 final; at p. 4.

³⁰¹ *Ibid.*, at p. 4 & 5.

³⁰² *Ibid.*

³⁰³ "Following the same logic, the Commission will strive to enable the combining of procurement data with data on financial flows through opening up and standardizing data on invoicing budgets, financial statements of public administrations, and invoicing." Commission Staff Working Document, A Single Market Strategy for Europe - Analysis and Evidence, Accompanying the document Upgrading the Single Market: more opportunities for people and business, 28 October 2015, SWD(2015)202, at p. 58 ff.

³⁰⁴ Communication from the Commission on A Digital Single Market Strategy for Europe, COM(2015) 192, 6.5.2015; Commission Staff Working Document, A Digital Single Market Strategy for Europe - Analysis and Evidence, SWD(2015) 100, 6.5.2015.

³⁰⁵ *Ibid.*, at p.3.

³⁰⁶ *Ibid.*, at p.3.

remaining differences, could benefit from the increased harmonisation and the increased legal certainty on the use of e-documents for fiscal purposes.

7.3.3 Single Euro Payments Area

The SEPA initiative is a set of EU policies and market agreements aimed at removing cross-border barriers to payments in the Euro area and at ensuring that the same market conditions, and, in particular, fees, apply to domestic and cross-border payments within it³⁰⁷. The objectives of the SEPA-related legislative initiatives are: (i) to reduce the fees for cross-border payments across the EU and, thus, to contribute to a better integration of all EU citizens and businesses into the EU economy³⁰⁸; (ii) to increase the efficiency and competitiveness of the EU payments market; (iii) to create an open and level playing field for competition in the payment service market; and (iv) to establish a pan-European platform from which innovative and value-adding payment services and products can be launched³⁰⁹.

Most of the above-mentioned objectives are not relevant to the objectives of SID in general, or to e-invoicing rules, in particular. Still, as far the fourth objective is concerned, that is the promotion of EU-wide innovative and value-adding payment services and products, the potential of including e-invoicing services in the SEPA is worth to be mentioned. As illustrated in the analysis of the e-invoicing solutions in the Effectiveness section, electronic banking systems already represents a viable e-invoicing solution for a non-negligible share of firms. SEPA, by harmonising payment processing, can reduce barriers for the automatic order-to-payment cycle, and more specifically to (cross-border) e-invoicing³¹⁰. In particular, the SEPA framework (thanks to both the harmonised rules and the non-discriminatory fees) can increase the use of cross-border e-payments, and, thus, the feasibility of directly linked e-invoicing solutions. More in detail, the extension of SEPA rules to direct debits allowed a safer and cheaper use of cross-border 'push' payments, which can be automatically triggered by an e-invoice. This augments the appeal of e-invoicing solutions for the suppliers and increases the more efficient handling (and thus lower costs) of the order-to-payment cycle³¹¹.

7.4 Summary of findings: Coherence

The rules provided by the Directive are largely coherent with the other EU policies, including both legislative acts as well as other initiatives and strategies. This conclusion is corroborated by both the analysis of the policy texts, and the opinions of the stakeholders.

Such a positive assessment is largely explained by two main reasons. First, **the degree of interaction between the VAT invoicing rules and other legislative areas is**

³⁰⁷ A proposal has been recently tabled by the Commission to extend the SEPA *acquis* to non-Euro Member States. Cf. Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 924/2009 as regards certain charges on cross-border payments in the Union and currency conversion charges, 28 March 2018, COM(2018)163.

³⁰⁸ Commission Staff Working Document, Impact Assessment Accompanying the document Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 924/2009 as regards certain charges on cross-border payments in the Union and currency conversion charges, 28 March 2018, SWD(2018)84, at p. 28.

³⁰⁹ Commission Staff Working Document, Impact Assessment Accompanying the document Proposal for a Regulation of the European Parliament and of the Council establishing technical requirements for credit transfers and direct debits in euros and amending Regulation (EC) No 924/2009, 16 December 2010, SEC(2010)1584, at p. 5.

³¹⁰ Caggemini (2007), SEPA: potential benefits at stake. Researching the impact of SEPA on the payments market and its stakeholders.

³¹¹ EBA Report 2010.

limited. The majority of stakeholders did not consider that any significant interaction (positive or negative) occur between invoicing rules and the other legislation, and very few of them have ever experienced any problems. With respect to EU accountancy rules, for which invoices play an important role to account for the costs and revenues of a company, the possible conflicts are limited by the fact that their focus is largely on how data are aggregated and presented in the company's balance sheets, rather than on the format or content of the underlying documents. Second, **VAT rules are preeminent to any other rule that can apply to invoices.** It means that other legislative areas, such as consumer protection or accountancy, make reference to invoices for their own purposes but that additional requirements are crafted so to make sure that they do not conflict with the VAT rules. With respect to e-invoicing in public procurement, the pre-eminence of the VAT legislation is explicitly mentioned in its binding provision – a legislative technique which helped in clarifying its scope and in preventing conflicts.

Few inconsistencies were noted, and, in most cases, they are of a limited severity. The main area of concern seems to be the interaction with GDPR, and namely whether and when certain invoice data shall be considered as 'personal data' and, thus, subject to the data protection requirements. At this moment, the concern is more a matter of legal certainty than of actual problems, given that the GDPR only came into force as of May, 2018. Some stakeholders are pointing out that an extra-cautious approach may be provisionally applied, and that, if this approach became the rule, this could create issues in terms for the efficiency of the invoicing process. Two other inconsistencies, of a more limited severity and less widespread across economic operators, are worth mentioning. First, the **different e-invoice definition adopted by the VAT Directive and the Directive on the use of e-invoicing in public procurement.** While it does not create practical problems, as the latter Directive is designed to avoid any conflicts, a minority of stakeholders point out that the definition adopted by the Directive 2014/55, which identifies automatically-processable invoices, better supports the promotion of structured e-invoices. Secondly, some stakeholders observe that, given the approval of the new eIDAS Regulation, **the e-seals could be included among the methods for ensuring I&A listed in Article 233.** Indeed, currently, e-seals can be used to prove the I&A of an e-document, and one Tax Authority explicitly mentioned them among the accepted methods, but they are not listed in Article 233.

As for the coordination and synergies of the SID with other EU initiatives in the e-invoicing field, a positive assessment is again warranted. The interaction with EMSFEI was positive, as this forum was instrumental to exchange information on the application of the e-invoicing rules, and on the uptake of this technology. The work done by the CEN in devising the European standard for automatically-processable e-invoices is expected to bring fruits in promoting their uptake, as well as in lowering or preventing cross-border technical barriers. Fiscalis 2020 has, so far, been rarely used to specifically address e-invoicing, but the tax authorities which had made use of it consider that there is a good fit with the SID objectives.

With respect to relevant EU policy priorities, no inconsistency with the SID objectives could be identified. Indeed, the push towards the simplification and harmonisation of invoicing rules and to the more widespread use of e-invoices fit very well with the general EU policies aimed at improving the functioning of the Internal Market, reducing administrative burdens (in particular for SMEs), and promoting the modernisation and digitalisation of the EU economy.

8 EU ADDED VALUE

This Section illustrates the assessment of the EU Added Value (EUAV), that is the evaluation of whether the outcomes and the impacts achieved by the Directive would have been achieved had the intervention not taken place at EU level, i.e. by means of national or bilateral policies. While in the Effectiveness section an effort was made to identify the extent to which certain outcomes, e.g. the increase in e-invoicing uptake, can be attributed to the EU intervention or to other factors, the EUAV assessment aims at measuring **what share of the outcomes / impacts attributed to the Directive have occurred because such a policy was adopted at EU level.**

The assessment was carried out with reference to the following specific objectives of the Directive:

- 1) The **simplification of e-invoicing and invoicing rules** (in Section 8.2);
- 2) The **reduction of the regulatory fragmentation** of VAT invoicing rules, i.e. the fact that national rules are more similar following the adoption of the Directive (in Section 8.3);
- 3) The **increased uptake of cash accounting**³¹² (in Section 8.4).

As for the improvement of tax control, the introduction of the Directive did not generate any tangible effect (as illustrated in Sections 5.5 and 6.4 above), and, thus, the assessment of the EUAV would not be meaningful.

8.1 Methodological approach

The assessment is not based on the full definition of a counterfactual scenario, which would require an assessment of how the state of the world would have evolved if the SID had not been adopted, for the following reasons. First, an impact assessment of the proposal, which would have included a detailed or quantitative subsidiarity test, is not available. Second, the definition of the counterfactual scenario is compounded by the lack of sufficient evidence about the state of the world without an EU intervention on VAT invoicing rules, as they have been regulated at EU level for more than 15 years (as discussed in Box 24 below).

Box 24 – The government layer for invoicing rules

The first generation of VAT Directives only provided for a generic obligation for taxable persons to issue an invoice for the transactions carried out; such an invoice had to include the taxable amount, the VAT due, and the VAT exemptions. Directive 77/388/EEC (the Sixth VAT Directive) confirmed this obligation and gradually added additional common requirements, though the definition of the format and content of invoices was largely left to Member States. The First Invoicing Directive was a game changer, as it was the first attempt to harmonise invoicing rules. Approved in 2001, and to be transposed by the end of 2003, it mandated a set of requirements on the format and content of invoices that had to be implemented by Member States. At that moment, the definition of invoicing rules was thus centralised at EU level, and the SID confirmed this arrangement.

For this reason, **a quali-quantitative approach**, which mimics a counterfactual scenario, has been adopted based on the stakeholders' feedback³¹³. Tax authorities and VAT practitioners were asked to state to what extent certain objectives would have been

³¹² No assessment of the EUAV is provided for the impacts on tax control, because the Directive is not assessed to have significantly affected the effectiveness and efficiency of tax control activities, once controlling for other factors, in particular the national enforcement strategies and the introduction of additional reporting requirements.

³¹³ The number of respondents varied between 60 and 62; 20 for cash accounting, as these questions were only asked to tax authorities in Member States where a cash accounting scheme targeted at micro-enterprises is in place.

achieved in the absence of the Directive, and could provide an answer over a qualitative scale. The scale has been converted into numerical values, then used to estimate a probability rate of the occurrence of the counterfactual event. The complement to this probability rate is the EUAV factor, i.e. the share of outcomes and impacts which have occurred because of the EU intervention.

Table 31 – Measurement of the EUAV factor

Scale	Associated probability	EUAV Factor
Very Likely	90%	10%
Likely	60%	40%
Unlikely	30%	70%
Impossible	10%	90%

Source: Authors' elaboration on targeted consultation.

8.2 Simplification of e-invoicing and invoicing rules

8.2.1 e-Invoicing rules

By simplifying the applicable rules, the Directive has positively contributed to a more widespread diffusion of unstructured e-invoicing. In this respect, it is estimated to have added 1.6 p.p. to the annual growth of the e-invoicing uptake among micro companies, and about 0.5 p.p. for companies with ten or more employees. This has, in turn, generated about EUR 900 million of administrative burden savings.

To establish the EUAV, it is necessary to determine **to what extent the Member States would have liberalized their e-invoicing requirements had the SID not been adopted**, which would have, in turn, increased the uptake of e-invoicing and generated comparable savings. This was possible under the previous rules, so that even prior to the Directive a number of countries – the Scandinavian countries, the UK, and Estonia – had adopted a liberal framework, which was built on the principle of technological neutrality and the possibility for companies to use either the e-invoice modalities mandated in the Directive (i.e. EDI and e-signature), or simpler formats, such as PDF.

Tax authorities and VAT practitioners were asked to determine the extent to which this would have occurred. About 30% of the respondents consider the occurrence to be 'very likely' or 'likely'. In particular, more and more Member States could have progressively transplanted the liberal approach into their national legislation, either by reforming their VAT legislation, or by progressively relaxing tax enforcement practices via secondary legislation or administrative regulations. The propagation of the liberal approach would have occurred partly by market pressure and partly because of the formal and informal networks of national legislators (e.g. EU working groups, Fiscalis groups), and because of the pressure from multinational companies active in more than one jurisdiction and international tax advisors. **Still, the majority of the stakeholders point out that the main driver of change in the VAT realm remains to be the EU legislation, and that fewer Member States would have introduced significant reforms if not prompted by the EU policies.** Hence, these interventions would have been more likely limited, both in terms of countries covered and the depth of the reforms introduced.

On average, the stakeholders' perceived probability that equivalent measures at national level could have been adopted is equal to 38%, and hence the EUAV factor for the simplification of e-invoicing rules has been estimated at 62%. By applying this factor, **the EUAV of the Directive on the uptake of unstructured e-invoices can be estimated at 1.0 p.p. of additional annual growth for micro companies, and**

0.3 p.p. for companies with more than 10 employees. In other words, the EU intervention generated an additional growth in the uptake of unstructured e-invoicing of between 0.3 and 1 percentage point per year. This, in turn, translates into **additional EU regulatory benefits in the area of EUR 570 million.**

Table 32 – EUAV: burden reduction due to e-invoicing requirements

	Estimated benefits		EU Added Value	
	Growth Rate (p.p.)	Cost savings (EUR mn)	Growth Rate (p.p.)	Cost savings (EUR mn)
<i>Micro</i>	1.6	323	1.0	200
<i>Firms with 10+ employees</i>	0.4/0.5	595	0.3	369
Total	-	918	-	569

Source: Authors' own elaboration.

8.2.2 Invoicing rules

As discussed in Section 4.3 above, with respect to the simplification of invoicing rules, **the Directive, first and foremost, increased the degree of legal certainty.** To a secondary extent, it also contributed to reducing administrative burdens. While, in most areas, the savings were not perceived as significant by economic operators, about EUR 38 million of annual savings in the seven fieldwork Member States can be attributed to the new rules on simplified invoices.

Stakeholders were asked to assess the relevant importance of various policy drivers for the simplification of the invoicing rules, and namely of (i) the Directive provisions (both the mandatory and optional requirements), (ii) national provisions, and (iii) national non-legislative interventions. The mandatory provisions of the SID were considered the most important legislative driver, and the role in the simplification of invoicing was considered as positive or very positive by the vast majority (87%) of respondents³¹⁴. For the optional Directive provisions and the national drivers, the role played was still positively assessed, but at a lower level (positive answers varied between 60% and 66% of respondents).

Also in this area, **the national approaches did differ prior to the SID,** and a number of Member States already had comparatively simpler invoicing rules in place, that did not go beyond the minimum requirements set out in the VAT Directive. The Directive resulted in an additional simplification, so that, while 12 EU countries had a 'liberal' approach to invoicing requirements in 2012, the figure increased to 21 in 2017.

The stakeholders' perception of the likelihood that a similar simplification would have been achieved by means of national or multilateral policies is slightly higher compared to the e-invoicing area. While for e-invoicing the share of stakeholders which consider it likely or very likely was about 30%, here it reached one third of the respondents. Again, it was pointed out that, as time goes by, more and more Member States could have implemented the simplification potential of the SID to its full extent. Also, in some countries, as in Portugal, the main push to review the overall invoicing framework came from internal pressure, and, in particular, the need to improve the fight against VAT fraud, rather than from the SID. However, in several other Member States, the Directive was instrumental in triggering a simplification of the invoicing rules. Furthermore, the Directive was instrumental in creating an opportunity for Member States to introduce simplifications which even went beyond the minimum SID requirements.

³¹⁴ Number of respondents varied between 52 and 62.

For the simplification of invoicing rules, on average, the stakeholders' perceived likelihood that equivalent measures at national level could have been adopted is of 40%, and, hence, the EUAV factor has been set at 60%. This implies **that a large part of the additional legal certainty would not have been generated**, and that the burden reduction would have been lower. Specifically **in the area of simplified invoice, the additional EU benefits can be estimated at about EUR 70 million over the 2014-2017 period**³¹⁵.

8.3 Reduction of regulatory fragmentation

By establishing common e-invoicing and invoicing rules, the Directive generated two main benefits for economic operators. On one side, **the divergences of national e-invoicing requirements, and thus the barriers to the use of cross-border B2B e-invoices, were largely overtaken**. Indeed, the uptake of unstructured e-invoices across intra-EU traders has grown more rapidly than in the overall business population, catching up with the overall level. Secondly, a **good level of harmonisation has been achieved in the area of invoicing rules**, so that few economic operators or tax authorities could point out significant barriers which still persist. When problems remain, they can be mostly found in other parts of the VAT legislation, or in adjacent regulations (e.g. archiving, additional e-reporting requirements)

The stakeholders' assessment of the additionality of the EU intervention in this area is more positive than for simplification measures. Indeed, the share of stakeholders considering that a comparable harmonisation process would have happened without EU intervention is as low as 15%. For e-invoicing, the main alternative path to harmonisation would have consisted of the mutual recognition of the relevant technologies, and the progressive harmonisation of e-signatures. At the same time, the stakeholders generally deem that, while a progressive simplification of invoicing and e-invoicing requirements was likely, this would have hardly happened in a fully convergent way. Thus, the Directive played a crucial role in the smoothening of the functioning of the Internal Market that took place over the last four years.

The stakeholders' perceived likelihood rate varies between 28% for invoicing requirements and 26% for e-invoicing rules. It thus means that **the bulk of the benefits in terms of improved functioning of the Internal Market are additional and have been generated because the harmonisation of invoicing rules has taken place via an EU intervention**, rather than by means of national policies or other regulatory mechanisms, such as mutual recognition.

8.4 Increased uptake of cash accounting

The possibility to introduce a cash accounting regime targeted to micro enterprises was already available prior to the SID. However, to make it more palatable to Member States, the SID introduced Article 167a, which generalised the possibility to postpone both VAT payments and deduction, thus limiting the negative impacts on the public budget cash flow. This was possible also under the previous rules, but an explicit derogation had to be requested to the VAT Committee. **The increase in the number of Member States opting for this regime after the SID was evident, with eight**

³¹⁵ This should be considered as a tentative estimate, since (i) the EUAV factor was measured over the EU28, while the savings over the seven fieldwork Member States; and (ii) no specific questions on the additionality of the simplified invoicing provisions were asked, hence the general EUAV factor for the simplification area was used.

more countries introducing cash accounting for micro enterprises, and four more expanding their pre-existing schemes.

The reform of the norms on cash accounting came during the economic and financial crisis, and, indeed, it can be considered as a measure that helped micro companies facing deteriorating payment conditions and liquidity constraints. Hence, it is possible that Member States, at least those with a sufficient fiscal capacity, would have introduced or enlarged cash accounting regardless of the SID intervention. Asked about the main drivers for introducing and expanding cash accounting, the tax authorities concerned consider that the first and foremost driver was the need to tackle deteriorating payment conditions, followed by the impact of the economic and financial crisis on the financial stability of companies. **The possibility, granted by Article 167a, to postpone VAT deduction for cash accounting taxable persons was considered of minor to moderate importance among the possible drivers.**

Even though Article 167a was not among the main drivers, when asked about the likelihood that they would have introduced or enlarged cash accounting without this new provision, few Member States state that they would have considered this measure in any case. **A majority of the respondents say that this was unlikely or impossible**, and they quoted the preoccupation that the cash accounting scheme would have hampered the VAT cash flow at a time during which public budgets were put under pressure by the crisis as a reason for this.

Based on this feedback, the stakeholders' perceived likelihood rate of introducing or enlarging the cash accounting schemes without the Directive intervention is of 45%, on average; hence, the EUAV factor was set at 55%³¹⁶. As the additional uptake of cash accounting caused by the Directive is estimated to have generated about EUR 33 million of financial cost savings, **the additional EU benefits can be estimated at about EUR 18 million over the 2014-2017 period.**

8.5 Summary of findings: EU added value

The assessment of the EUAV generated by the Directive – that is the amount of benefits which have been caused insofar as VAT invoicing rules were enacted at EU level – was **based on the stakeholders' perception** about how likely the same outcomes would have been achieved if only national or bilateral interventions had occurred. Their assessment, provided on a qualitative scale, was then transformed into numerical values to estimate the stakeholders' perceived likelihood, and thus its complement, that is the **EUAV factor**. Whenever feasible, the national willingness and capacity to adopt rules similar to the one provided was verified based on review of the invoicing rules in place in certain countries prior to the Directive transposition.

The EUAV factor signals that **a good deal of benefits would not have occurred if the invoicing rules were regulated by national or bilateral policies**. Indeed, the EUAV factor hovers around 60% for the area of simplification, meaning that other Member States could have simplified e-invoicing requirements and made a better use of the simplification potential of the First Invoicing Directive, thus joining the more liberal countries. Also for cash accounting, the EUAV factor is similar (slightly less, at 55%), thus signalling that a lower number of Member States would have adopted the regime or increased its scope, if Article 167a had not been introduced. The EUAV factor is higher, and thus the likelihood that similar outcome would have been achieved lower, in the area of harmonisation. The fact that the SID spurred convergence on invoicing

³¹⁶ Taking into account only stakeholders from the Member States in which the cash accounting scheme was introduced or enlarged.

and e-invoicing requirements could have hardly been replicated by national actions, so that, if simplifications had happened, they would have probably imperilled the smooth functioning of the Single Market.

For the simplification and cash accounting areas, the EUAV assessment has been carried out quantitatively, and it is summarised in Table 33. In total, **the EUAV of the SID amounts to about EUR 660 million over the 2015-2017 period. With respect to harmonisation, no quantitative assessment is possible, but the qualitative analysis shows that most of the benefits in this area would have not occurred without the SID.** Finally, as the impacts in terms of tax control were assessed as negligible (both in terms of costs and cost savings, and increased VAT compliance), no EUAV assessment is provided.

Table 33 – EUAV generated by the Directive (EUR million)

	Cost Savings
<i>Simplification – e-Invoicing</i>	570
<i>Simplification – Invoicing</i>	70
<i>Cash accounting</i>	18
Total	658

Source: Authors' own elaboration

9 POSSIBLE REVISIONS TO THE DIRECTIVE

This Section summarises the feedback received from stakeholders on possible revisions to the Directive. More in details, an exhaustive list of possible revisions was prepared based on: (i) the text of the Commission Proposal, which included a number of changes which, at that time, had not been accepted by the legislator; (ii) the feedback provided by the stakeholders during the familiarisation interviews; and (iii) desk research on public sources and stakeholders' position papers³¹⁷.

The list of revisions was submitted to the tax authorities and VAT practitioners, and their views were collected via structured questions, which are analysed quantitatively in the remainder of the section. The other stakeholders also had the opportunity to provide their views via open questions. The stakeholders could also point out to additional revisions which they would like to consider, but no consensus emerged on additional changes, thus confirming the comprehensiveness of the proposed reforms. The same closed questions on the possible revisions were also included in the PC; their views are largely consistent with those analysed in this Section, albeit on a more positive note³¹⁸.

The analysis of the stakeholder's feedback is provided across five different policy areas:

- 1) **e-Invoicing requirements** (in Section 9.1);
- 2) **Simplification of invoicing rules** (in Section 9.2);
- 3) **Harmonisation of invoicing rules** (in Section 9.3 ;
- 4) **Cash-accounting regime** (in Section 9.4); and
- 5) **Archiving rules** (in Section 9.5).

At the beginning of each section, the proposed revisions are listed in a Box.

9.1 E-invoicing requirements

Box 25 – Proposed revisions: e-Invoicing

- 1) **Definition.** Definition of e-invoice should be modified to distinguish between structured and unstructured invoices.
- 2) **Removal of acceptance.** Requirement of the acceptance of e-invoice by the recipient should be removed.
- 3) **Removing EDI and QES.** EDI and qualified e-signature should not be mentioned in the legislation.
- 4) **New methods.** New methods to guarantee invoice I&A should be mentioned in the legislation.
- 5) **Guidance on EDI.** Detailed guidance on EDI procedures to prove invoice I&A should be available.
- 6) **Minimum requirements for e-signatures.** Minimum requirements for the use of e- signatures to prove invoice I&A should be introduced.
- 7) **Guidance on BCAT.** Detailed guidance on how to apply the 'business controls' option should be available.

As for e-invoicing requirements, **there is a strong support, both across tax authorities and business stakeholders, on certain piecemeal adjustments.** These include, first and foremost, the **provision of further guidance on BCAT**, both at national and EU level. This is also an expectation of certain tax authorities, pointing out that the Explanatory Notes, which are unanimously considered a key document which contributed to the clarity and effectiveness of the SID, have no longer been updated despite the fact that they should have been a 'work-in-progress'³¹⁹. A positive, but more limited, support goes to the provision of further guidance on EDI. However, the relevance of this change is largely limited to large companies, which are the sole

³¹⁷ The revisions result from the Consultant's elaboration of these sources and represent in no way the Commission's opinion.

³¹⁸ For a full review, cf. the Synopsis report in Annex B.

³¹⁹ Cf. Explanatory Notes, at p.2.

users of these systems. As for the establishment of minimum requirements for e-signatures, the stakeholders in favour of this option point out that a reference could be made to the new eIDAS Regulation, avoiding the introduction of duplicated, and possibly inconsistent, requirements in the Directive.

Concerning more radical changes, ***the support for the removal of the acceptance requirement³²⁰ remains below 50% across VAT practitioners, and more markedly so across tax authorities.*** The removal of the acceptance requirement could further support the diffusion of e-invoicing technologies, and remove a constraint for tax authorities wishing to make it mandatory. At the same time, however, the acceptance is considered, even by the most advanced players, as a protection for those taxable persons which are not capable of handling e-invoices, and a limit for the further diffusion of non-harmonised national requirements, including mandatory B2B e-invoicing. One tax authority suggested that, in case, the removal of this requirement could be coupled with the possibility for the taxable person to print e-invoices and store them in paper format, to balance the issuer's and the receiver's freedom.

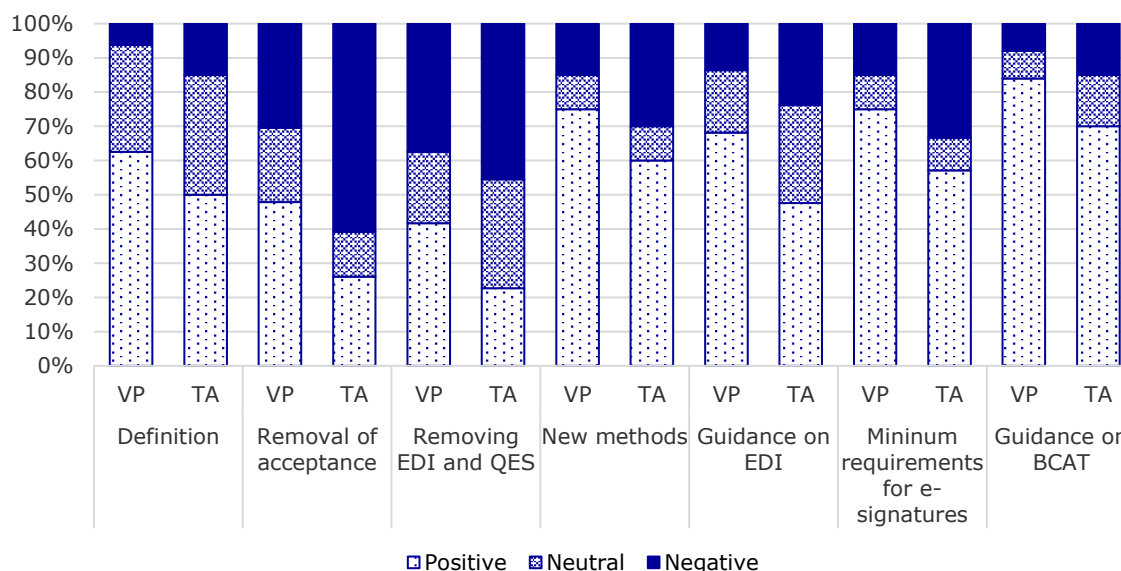
With respect to the possibility of ***removing the existing reference to the examples of methods to guarantee e-invoice I&A from Article 233, both business stakeholders and tax authorities are not in favour of such a revision.*** Indeed, the common opinion is that the current text strikes a balance between technological neutrality – a driver for efficiency and innovation – and the need to have certain 'safe harbours' – a driver for legal certainty. When it comes to the ***proposed expansion of the list of methods*** that could be used to prove I&A, both stakeholder groups consider that the list could be enlarged, but, when asked about specific methods, only the e-seals, introduced by the eIDAS Regulation, were mentioned. To the contrary, no specific suggestions concerned the inclusion of other, more advanced technology, such as the blockchain.

Finally, ***views are more split as to introducing the distinction between structured and unstructured e-invoices in Article 217.*** While, generally speaking, the support to such a revision is prevalent across both stakeholder groups. At a more detailed level, however, the stakeholders differ on whether, following the introduction of a distinction between different formats, only the structured documents should be treated as 'true' e-invoices, while unstructured e-invoices and paper invoices should become a single category from the point of view of their handling and storage. This view is, however, shared by the most advanced business stakeholders. One stakeholder points out that introducing such a distinction would pose challenges for the hybrid formats³²¹, which would risk falling in between the two categories.

³²⁰ 'As required by Article 232, the use of an e-invoice is subject to acceptance by the recipient'.

³²¹ Hybrid invoices are e-invoices having both a data and visual component, e.g. a PDF with an embedded XML component that can be automatically-processed.

Figure 58 – VAT practitioners and tax authorities’ views on revisions: e-Invoicing



Note: VP: VAT Practitioners; TA: Tax Authorities
Source: Targeted consultation.

9.2 Simplification of invoicing rules

Box 26 – Proposed revisions: Simplification

- 1) **Standard invoice: simplification.** The elements to be included in standard invoices should be further simplified.
- 2) **Simplified invoice: larger scope.** The situations in which a simplified invoice can be used should be expanded.
- 3) **Simplified invoice: reduced content.** The content of a simplified invoice should be further simplified.
- 4) **Summary invoice: longer period.** The use of summary invoices should be possible also for transactions taking place in periods longer than one month.
- 5) **Summary invoice: prohibition of supporting documents.** The requirement to attach a proof of supply (e.g. delivery slips) to summary invoices should be prohibited.
- 6) **Self-billing: tacit prior agreement.** The issuance of self-billing invoices should not be subject to a written prior agreement.
- 7) **Self-billing: tacit acceptance.** Tacit acceptance of a self-billing invoice (e.g. by paying the transaction) should always be considered sufficient.

In this area, the stakeholders were confronted with the possibility of deepening some of the simplifications introduced by the Directive for the issuance of a standard invoice or the specific invoicing regimes. **Overall, the views of VAT practitioners and tax authorities on further simplifications are more split compared to the other areas.** The general trend is for the former to welcome any further simplification, and, for the latter, to consider them very cautiously. The main drivers of this cleavage seem to be, first, the relative lower prominence that the tax authorities give to simplification among the possible goals of the EU invoicing rules³²². Secondly, the tax authorities consider that there is a trade-off between simpler rules and effective tax control, and would like to make sure that any advance towards the former goal is not detrimental to the latter.

The strongest support from VAT practitioners is for extending the scope of simplified invoices and further simplifying the content of standard invoices. The former option is also considered positively by about a third of the tax authorities – one of the highest approval rate in this area. More in details, business stakeholders point

³²² Cf. Section 4.1 above.

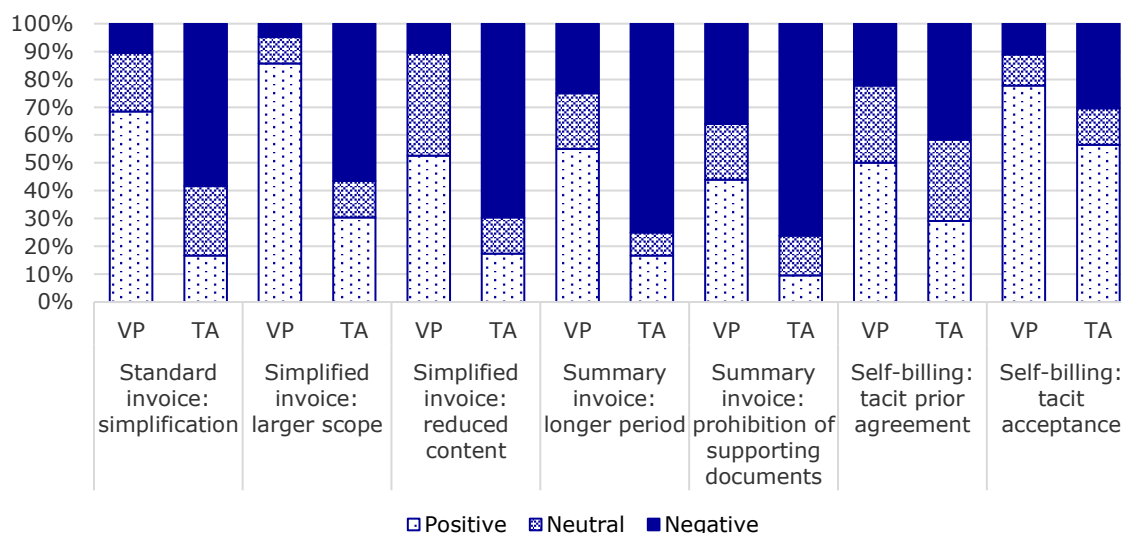
out that a higher minimum threshold could be adopted for the provision of services, for which EUR 100 is considered too low, and that Member States could be fostered (or forced) to use this simplification to its full potential, i.e. allowing simplified invoices up to EUR 400. However, it is underlined that this regime is currently under-used in several countries, so that actions would be, first, needed to make economic operators aware of it and of the fact that simplified invoices represent a valid document for VAT deduction.

As for the content of standard invoices, certain stakeholders comment that the VAT number could be a sufficient identifier for the trading partners, so that other details, such as their address, could no longer be required. However, **a simplification of the trading partners' details is resisted by several tax authorities**, which already consider that the interpretation given by the CJEU in this area endangers the probatory value of the invoice. In case a legislative revision were not possible, economic operators point out that guidelines could be provided at European level to determine how certain items, such as the address of the customer or the description of the goods or services provided, should be detailed, in line with the CJEU jurisprudence. On a separate note, one tax authority suggested to make the list of items mentioned in Article 226 as mandatory, to further harmonise the content of standard invoices across the EU. This would, however, also require a harmonised approach to the inclusion of the VAT number of the customer in all invoices³²³, which several tax authorities consider a key information for tax control purposes. Then, one stakeholder mentioned that, for cross-border VAT-exempt transactions, a reference in English to the applicable Directive provision could always be considered sufficient.

Finally, as for **summary invoices, slightly more than half of VAT practitioners support revising Article 223 to extend the minimum coverage period**. However, the qualitative comments point out that the reference period could never be longer than the tax period, and that, for most of non-micro companies, the VAT is collected on a monthly basis. **The possibility of prohibiting the requirements to attach other documents (e.g. delivery notes) to the summary invoice did not encounter the favour of most VAT practitioners** and, most importantly, was considered **inappropriate by more than three-quarters of tax authorities**, as the supporting documents are considered important for control purposes, and, in particular, to demonstrate the link between the summary invoice and the underlying transactions. The support for **removing the need to have a written prior agreement for self-billing was moderate among business stakeholders**, as they still routinely do it in writing, usually as a specific clause in the purchase contract, and more limited among tax authorities.

³²³ Article 226(4) requires the inclusion of the customer's VAT number only for invoices referring to transactions subject to reverse charge or for the intra-EU supplies of goods. Article 227 allows Member States to extend this requirement to other kinds of transactions.

Figure 59 – VAT practitioners and tax authorities’ views on revisions: Simplification



Note: VP: VAT Practitioners; TA: Tax Authorities
Source: Targeted consultation.

9.3 Harmonisation of invoicing rules

Box 27 – Proposed revisions: Harmonisation

- 1) **Country of establishment rule.** Each taxable person should comply only with the invoicing rules of its country of establishment.
- 2) **Uniform time limit.** A uniform time limit should be introduced for all transactions and not only for intra-EU transactions.
- 3) **Monthly conversion rates.** The definition of the ECB exchange rate should be made more flexible, allowing the use of monthly rates.
- 4) **Other conversion methods.** The use of other methods for the conversion of currency (e.g. business internal exchange rate, online portals) should be allowed.
- 5) **Uniform rules for self-billing.** Rules for self-billing invoices should be uniformly established in the Directive.

Together with legal certainty, harmonisation is the goal considered the most important by both the business stakeholders and the tax authorities. This is reflected in a rather **uniform and high approval rate of the revisions proposed in this area across the two stakeholder groups.**

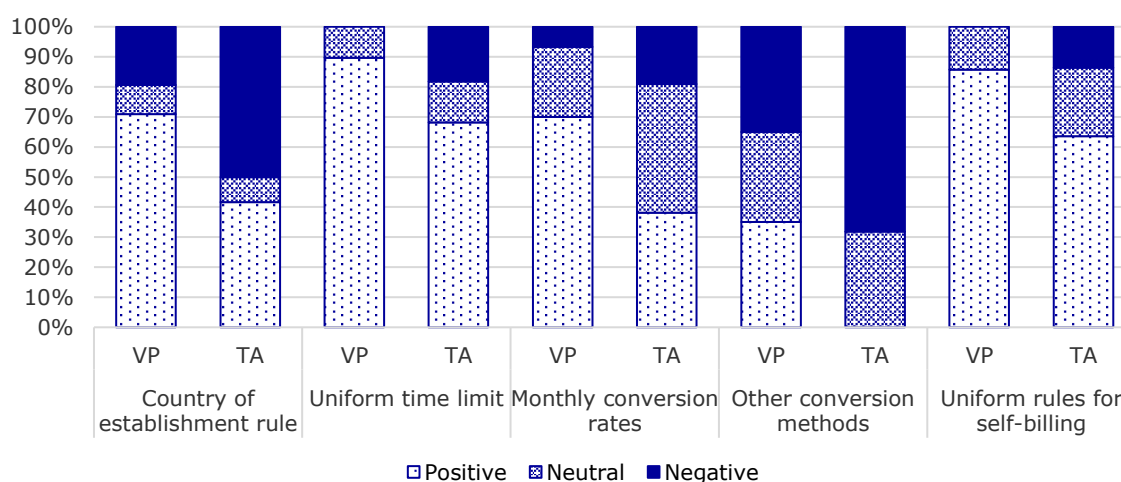
A majority of the VAT practitioners and the tax authorities suggest that the time is ripe for introducing a uniform time limit for all transactions and uniform rules on self-billing, thus removing the residual national discretionary power in these areas. This would build up on the efforts of the SID, scaling it up to a full harmonisation. The support for the harmonisation of self-billing, obviously, is strongly echoed by the most affected stakeholders, and, in particular, multinational companies and business federations. As for the time limit, the added value of allowing Member States to retain discretionary power in this area appears questionable. The true challenge would be to find a compromise between Member States imposing the invoice to be issued on the very same day or those allowing a time limit of up to six months.

With respect to the applicable invoicing regimes, the possibility **to link invoicing rules exclusively to the supplier’s country of establishment** was discussed with the stakeholders. This somehow recalls the original Proposal, in which invoicing rules were linked to the supplier’s VAT number. **Business stakeholders are in favour of this option,** even though it was made clear that this would simplify the life of the issuer,

but could complicate that of the receiver, especially when the place of transaction coincides with the latter's country. In any case, the qualitative comments suggest that the impact of the revision may be limited, since (i) the current setting already represents a good progress in terms of legal certainty compared to the pre-SID situation, and (ii) cross-border invoicing is not a source of major complexities, except when specific VAT regimes need to be applied. **Tax authorities are opposed to this revision by a slight majority**, as this would clearly put more pressure on the convergence of invoicing rules, and, thus, on the current national room for manoeuvre. One tax authority suggested that this option would be acceptable only if, in line with the previous proposal, an exception for reverse charge transactions were introduced, so that the Member States in which the VAT is due could retain the control of the invoicing requirements.

Finally, two suggested revisions concern the **currency conversion rate**. One is a minor revision, i.e. the specification of the fact that the reference period to be used can be longer (e.g. monthly rates). This revision, which would consolidate certain national best practices, is favoured by business stakeholders and not opposed by tax authorities. On a more radical ground, the possibility of introducing other conversion methods was discussed, and, namely, the reference to internal business rates, which multinational companies would consider a major simplification. However, the support is limited across business stakeholders, since they point out that the current regime is already sufficiently flexible, also considering that in many Member States the possibility to ask for the authorisation to use different conversion rates exist. Tax authorities were largely against this proposal, fearing that a higher degree of flexibility would risk triggering problems, and, namely, the risk of disputes on the correct pricing of cross-border transactions.

Figure 60 – VAT practitioners and tax authorities' views on revisions: Harmonisation



Note: VP: VAT Practitioners; TA: Tax Authorities
Source: Targeted consultation.

9.4 Cash accounting regime

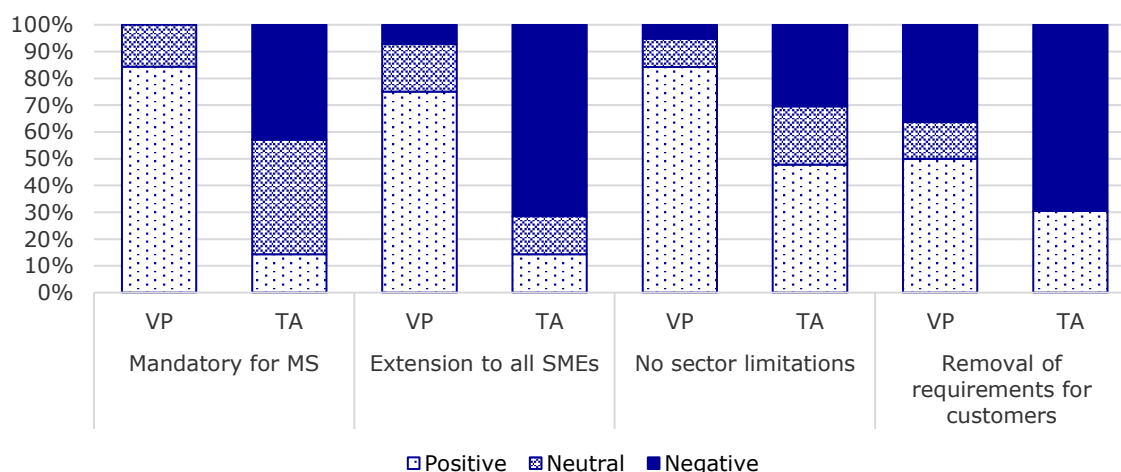
Box 28 – Proposed revisions: Cash accounting

- 1) **Mandatory for Member States.** The possibility for micro enterprises to opt for cash accounting should be made mandatory in all Member States.
- 2) **Extension to all SMEs.** The possibility to use the cash accounting scheme should be extended to all SMEs and not be limited only to micro enterprises.
- 3) **No sector limitations.** The possibility to use the cash accounting scheme should not be limited to specific business sectors.
- 4) **Removal of requirements for customers.** Customers of taxable persons using the cash accounting scheme should be allowed to deduct VAT upon issuance of the invoice.

On cash accounting, the possible revisions concern the extension of its scope and the removal of the requirements for the customers. **Business stakeholders are generally in favour of expanding the scope of cash accounting** by: (i) making its introduction by Member States mandatory, rather than optional; (ii) extending its scope to SMEs and not only to micro enterprises; and (iii) removing sectoral limitations³²⁴. **Tax authorities are much less receptive to these revisions**, especially the extension to SMEs, as this would pose a severe constraint on the VAT cash flow to the public budget. Importantly, in Germany, where cash accounting taxable persons can still deduct input VAT upon invoice issuance, the stakeholders would rather keep the current threshold than lose such right if a higher threshold commands a more careful management of the impacts on the public budget.

The possibility to mandate that customers are not affected by the cash accounting status of the suppliers as far as their VAT deduction is concerned is mildly supported by business stakeholders, even though this requirement is currently in place in ten Member States only. However, from the fieldwork, it emerged that many large companies can adapt their accounting system to this requirement or, when this is not the case, ignore it and face no or very limited penalties. On the other hand, **most of tax authorities are against this limitation** in their discretionary power, feeling that by regulating the customers' deduction they can modulate the impact of cash accounting on the public budget.

Figure 61 – VAT practitioners and tax authorities' views on revisions: Cash accounting



Note: VP: VAT Practitioners; TA: Tax Authorities
Source: Targeted consultation.

9.5 Archiving

Box 29 – Proposed revisions: Archiving

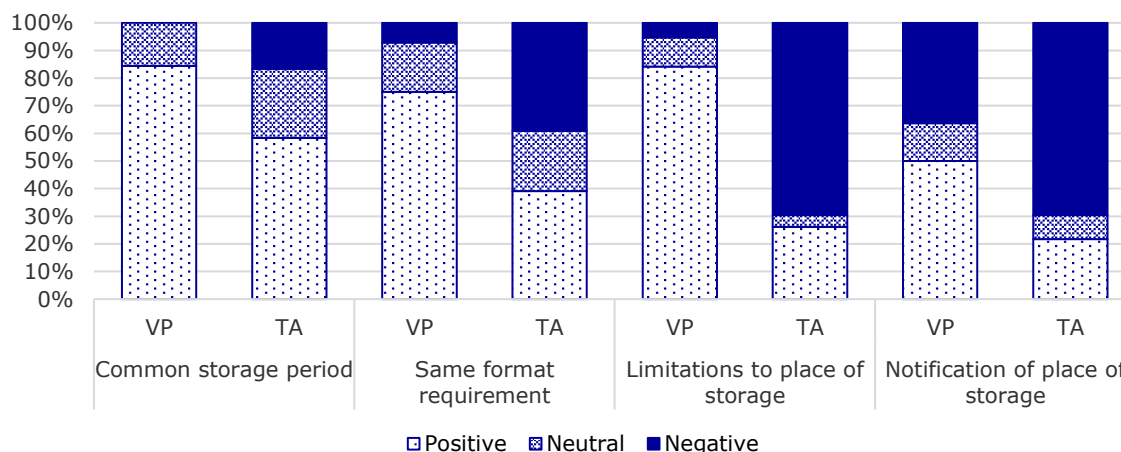
- 1) **Common storage period.** Common EU storage period for VAT invoices should be introduced.
- 2) **Same format requirement.** Requirement of storing invoices in the original format should be removed.
- 3) **Limitations to place of storage.** Limitations or conditions imposed on the place of storage should be removed.
- 4) **Notification of place of storage.** Requirement to notify the place of storage should be removed.

³²⁴ The extension of cash accounting beyond micro companies is actually the review which would have an impact on most Member States, since making cash accounting mandatory in all Member States or remove the sectoral limitations would not significantly alter most of the national frameworks.

The archiving rules were not affected by the Directive, although the Proposal attempted to. **The most radical change would have been the introduction of a common storage period. Currently, this would be welcomed by most business stakeholders and by slightly more than half of tax authorities.** As for the length of the period, economic operators would like to see it shortened. Tax authorities hardly share this view, and consider that, because of the more and more widespread use of e-archiving, a longer storage period would not impose a significant burden on companies.

Concerning the more detailed requirements, **the business stakeholders also consider positively the possibility to remove the requirement to store invoices in their original format.** Differently, several tax authorities are concerned that it would then be difficult to identify the original invoice, and that this could negatively affect control activities. As for **limitations to the place of storage**, this is not considered anymore needed by the economic operators, as long as full online access to the invoice archive is guaranteed. However, certain stakeholders also point out that, in practice, **notifying the tax authority would not represent a significant burden for economic operators**; reportedly, this can sometimes be difficult for non-established providers of e-invoicing services.

Figure 62 – VAT practitioners and tax authorities’ views on revisions: Archiving



Note: VP: VAT Practitioners; TA: Tax Authorities

Source: Targeted consultation.

Finally, a fair share of the debated focused on the **stringency of archiving requirements**. The e-invoicing service providers and the multinational companies stress the need for having harmonised rules. In countries where detailed archiving provisions are in place, such as Germany and Italy, also domestic stakeholders express the wish that common EU rules are introduced, to limit to the freedom of the legislator in this respect. The situation is, however, complex. Indeed, it would be difficult to carve out a set of specific rules for the archiving of invoices, given that the national regimes apply to all fiscal documents and there is no EU law in this respect. It was, however, suggested to consider the possibility to create a set of EU requirements for the cloud storage of invoices, via a kind of pan-European invoice cloud storage standard, which would then be given presumption of compliance with the national archiving regimes.

10 CONCLUSIONS AND POSSIBLE WAYS FORWARD

This section presents the main analytical conclusions on the current state of the Directive, as well as the forward-looking considerations. The latter focuses specifically on whether any evolving need requires new regulatory interventions, on how to achieve the Directive full potential, and on whether there is an ongoing need for EU action in this field. Building on the conclusion and the forward-looking assessment, possible ways forward to further harmonise and simplify the invoicing rules are discussed.

10.1 Addressing stakeholders needs

The Directive provisions remain largely relevant to the stakeholders' needs, and namely to the demand for clearer, simpler and more harmonized e-invoicing and invoicing rules. New needs have emerged, but in areas only indirectly connected to the Directive, thus limiting the potential for introducing legal revisions to could address them.

10.1.1 Remaining issues

e-Invoicing rules. With reference to the current e-invoicing regulatory framework, one single aspect clearly emerged as still complex, not uniformly interpreted by the tax authorities, and poorly applied by economic operators across the EU, i.e. ***the BCAT option*** to prove the e-invoice I&A. The problems with the BCAT option are compounded by the ***lamented lack of clear guidance on its interpretation and application*** in the Directive as well as in the Explanatory Notes. Article 233 of the Directive establishes the principle of the freedom of evidence for the economic operators to prove I&A. However, in the practice, the only methods used include: (i) e-signature; (ii) EDI; and (iii) BCAT. As a consequence, *de facto*, BCAT works as the default method to prove the e-invoice I&A for all companies that do not opt for e-signatures or EDI. This implies that most, if not all, companies exchanging e-invoices as unsigned PDFs should have a BCAT system in place. However, the compliance by companies and the enforcement by tax authorities were limited, and even absent in some Member States. Nevertheless, no evidence emerged that the poor compliance and enforcement of the BCAT led to an increase of VAT evasion.

A radical revision of this Directive provision, moving towards a more dogmatic and/or substantive approach to the application of the BCAT option, looks largely inappropriate based on the following considerations. First, the definition of a set of specific procedures that a company should comply with to demonstrate e-invoice I&A would be in contradiction with the intent of the BCAT to encompass many different types of business processes, as well as with the taxpayer's freedom of evidence principle enshrined in the Directive. Second, a similar approach is regarded as anachronistic, considering the limited (and declining) importance attributed by an increasing number of tax authorities to strict I&A rules because of the introduction of additional e-reporting requirements, enabling more effective and timely controls of the transactions without having to consider the related invoice. Third, it would risk introducing an additional burden on businesses, especially on SMEs, potentially limiting the adoption of e-invoicing.

Thus, no revision of the Directive seems warranted, but a ***better elaboration of the BCAT option in an updated version of the Commission Explanatory Notes could be appropriate***, taking into account the various implementation modalities. The Explanatory Notes could clarify that:

- the routine business controls that any company makes during the invoicing process - i.e. checking that the invoices issued and received correspond to the sale/purchase orders – would largely meet the BCAT requirements;
- the BCAT does not add anything specific compared to the previous legal framework, and it is subsumed by the general duty that a company needs to demonstrate that its claim to VAT deduction is valid.

In this interpretation, the BCAT would thus come closer to an ex post liability for companies to demonstrate the validity of an invoice in case of verifications, than to an ex ante system of controls that a company needs to have in place.

An update of the ***Explanatory Notes could also fill some gaps in the legal definition of e-invoices***, which reportedly generate legal uncertainty to e-invoicing service providers, such as the clear identification of what the 'original' invoice is when different forms/formats are used for the same transaction, or when some digitization activities are carried out, which transform the invoice in between its issuance and receipt.

Invoicing rules. According to the stakeholders' opinion, including tax authorities, ***there are no pressing issues on invoicing requirements*** that generate unnecessary administrative burdens for economic operators. There may still be a need to achieve more harmonization in certain areas, such as the self-billing requirements and the time limit for the issuance of invoices. For these provisions, indeed, there is a limited justification in keeping the national diverging approaches.

10.1.2 Emerging issues

e-Invoicing rules. The technological landscape for e-invoicing has remained quite stable since the Directive was adopted, and ***new e-invoicing solutions have neither be introduced nor are in sight***. This implies that the methods mentioned in Article 233 remain valid. Besides, the principle of technological neutrality proved workable and resilient, because the freedom of evidence combined with the open list of I&A methods strikes a reasonable balance between the needs of tax authorities and the demand from the economic operators and service providers for legal certainty, business freedom, and harmonization. Thus, ***the only reasonable revision of Article 233 could be the mentioning of e-seals***, which could be included alongside of e-signatures, thus bringing the VAT Directive fully in line with the new eIDAS Regulation.

Archiving rules. The complexity and regulatory fragmentation of the archiving rules for e-invoices has increased unevenly since the transposition of the Directive. This relates to certain countries having adopted very detailed rules on the e-archiving of fiscal documents, which obviously also apply to e-invoices. These rules are considered problematic, first and foremost, by domestic stakeholders, which complain about the difficulties and the costs of compliance. Secondly, they may also hamper the provision of cross-border e-archiving and e-invoice services.

In this area, it would be difficult to intervene via the EU VAT legislation, or any other EU intervention, since the detailed requirements on the storage of invoices, in particular, and fiscal and accountancy documents in general, are left to Member States. In the long-term perspective, a possible solution in this area could consist in the creation of ***a standard for a European cloud service in which e-invoices could be stored in compliance with the VAT Directive***, which would then also enjoy presumption of compliance with the various national archiving regimes. Obviously, the use of this platform would need to be made consistent with the data protection rules, and would remain optional, so that, in the Member States in which the archiving rules do not

represent a problem for companies, there would be no need to opt for it. Such a technical solution could, thus, represent a viable tool for economic operators and providers of e-invoicing and e-archiving services in an area where further legal harmonization could hardly be achieved.

Mandatory B2G e-invoicing. Mandatory e-invoicing requirements for B2G transactions have been adopted by several Member States over the last five years in a rather disharmonized way. Here, the different national standards and platforms have created new barriers to cross-border B2G transactions. However, the situation is still in a flux, given that the hEN standard has recently been adopted (in April, 2018), and that certain provisions of the Directive 2014/55 will only start coming into force as of April, 2019. More time needs to be given for the effects of the hEN to occur, before considering whether and to what extent the current differences remain a barrier to trade and would thus require a harmonisation measure.

Emerging issues: Additional e-reporting requirements. The last five years have seen an increase in the number of Member States introducing additional e-reporting requirements. These requirements fall outside of the invoicing rules, and are not harmonised by the EU VAT legislation. However, they have an impact on invoicing because part of the information that needs to be transmitted is, or could be, included in the invoice. This creates two challenges for the EU invoicing framework:

- 1) ***whether and to what extent the invoicing rules could be made consistent with the needs of the e-reporting systems***, so that there are no duplications or gaps between the information to be included in the invoices and the information to be submitted later to the tax authorities. Indeed, at the moment, there are still cases in which more information than what it is included in an invoice shall be sent for the transaction-based reporting, and this makes compliance with the latter more cumbersome³²⁵;
- 2) ***whether and to what extent e-reporting requirements could be harmonized at EU level, and on what basis*** (e.g. type of information required, modes of transmission, frequency of transmission or real-time controls).

The second challenge falls outside the scope of the invoicing rules, and would probably best be addressed in the context of the other obligations for taxable persons³²⁶. The first challenge, in principle, could be addressed by a revision of the invoicing rules, and, in particular, of the content of standard invoices, regulated by Article 226. However, such a revision looks hardly practicable at the moment, given the differences in reporting requirements adopted at national level, and the risk that, to adapt to the reporting requirements, complexity is re-introduced in Article 226, thus leading to unjustified adaption costs for all EU economic operators.

10.2 Achieving the Directive full potential

Overall, ***the assessment of the Directive is largely positive***, having effectively supported the simplification and harmonization of e-invoicing and invoicing rules across the EU. Hence, the SID has contributed to foster the (unstructured) e-invoicing uptake, reduce the administrative burdens on businesses, increase legal certainty for economic operators, and support the proper functioning of the Internal Market. Still, in some

³²⁵ EMSFEI (2018), Discussion paper on the growth of additional requirements and the fragmentation of provisions relating to e-Invoicing at Member State level, Version 1.0.

³²⁶ Such as the VAT returns and the recapitulative statements, regulated in Chapter 5 and Chapter 6 of Title XI of the VAT Directive.

areas, the achievements of the Directive were lower than its potential, and, in particular with respect to: (i) the reduction of administrative burdens; (ii) the improvement of tax control, and (iii) SME promotion. Here below, it is discussed to what extent the potential benefits are still there to gain, and suggestions are proposed on how to possibly address them.

10.2.1 Reduction of Administrative Burdens

e-Invoicing rules. The Directive played a positive role towards the increase in the rate of adoption of unstructured e-invoices in the EU, especially for micro companies. However, the unstructured format allows achieving only a (minor) part of the potential savings from e-invoicing, thanks to a quicker issuance process, in particular for data handling and the elimination of paper and postage costs. Differently, automatically-processable structured e-invoices allow for a full (or quasi-full) automatization of the invoicing process, both in the active and passive parts of the cycle. Consistently, ***the estimated amount of savings generated by the Directive in this area is considerably below the potential EU aggregate gains from e-invoicing discussed in the literature.***

This is the outcome of the conscious policy decision of the Directive not to differentiate between structured and unstructured e-invoices. As a consequence, most of micro and small companies chose the ‘path of minimum resistance’ and adopted the simplest and least costly e-invoice technology, that is PDF e-invoices. This may be rational from an individual firm’s perspective, as the gains from automatically-processable e-invoicing when the number of invoices exchanged is low (i.e. less than 1,000 per month) are often positive but too small to justify the adoption of more advanced technologies and an overhaul of a company’s routine. From a societal perspective, this may be suboptimal, because the diffusion of these technologies, and the consequent reduction in their invoicing costs, do seem to have the capacity of generating positive and possible significant net impacts for the EU economy.

In order to promote the uptake of the structured e-invoices, a revision of the definition in Article 217 could be introduced, clearly differentiating between structured e-invoices, which are automatically processable, and other invoices (thus, including both unstructured PDFs and paper ones). The adoption of the former e-invoice format could be promoted by the removal of other obligations, e.g. reconsidering the frequency, depth and overall need of VAT returns or recapitulative statements. Or, alternatively, monetary incentives could be provided to micro and small companies adopting this technology, to compensate for the switching costs, in combination with the free access to the e-invoicing systems and platforms³²⁷.

The possibility of introducing an even more radical revision, i.e. considering only structured e-invoices as a valid document to claim VAT deduction, could remain on hold for the moment, but it may well be considered in the medium term, taking advantage of the Italian experience. Given the timing of this Study and of the possible future revision of the Directive, it is worth waiting to know the effects of the mandatory B2B e-invoicing in Italy. First, it is a country with a high VAT Gap, and it will be possible to see whether, in 2019, the VAT revenues increases as expected. Secondly, it is a country whose economic structure consists of more micro companies and SMEs than the EU average; as a consequence, it could be verified (i) how significant the switching costs are for smaller operators; and (ii) whether the net impacts are positive also for very small operators, as well as for the Italian economy in general.

³²⁷ This measure attracted the highest rate of approval from the participants in the PC among the proposed measures to support e-invoicing uptake.

Finally, it will also be a testbed to see whether the 'commoditization' of structured e-invoice services will lead to a plurality of cheaper solutions offered also to micro and small companies, which is currently not the case in most Member States. Based on the Italian experience, a more solid evidence base would be available to compare the options of: (i) leaving the e-invoice definition as it is, (ii) introducing a differentiation and some associated incentives for structured e-invoices, or (iii) requiring that all invoices are issued in a structured electronic format.

Invoicing rules. Other than by promoting the uptake of unstructured e-invoices, the Directive did not lead to a significant reduction of administrative burdens. At the same time, the Study consistently shows that the stakeholders have a positive opinion about the functioning of the Directive provisions and could not identify any EU invoicing rule as a source of significant unnecessary burdens. Rather, most of the complaints come from the burdens originating from other legal provisions, and, in particular, national archiving rules for e-documents and additional e-reporting requirements. Therefore, **there seems to be not much additional space for burden reduction by means of simplifying the invoice requirements.**

10.2.2 Improvement of tax control

The Directive had no or negligible effects on the effectiveness and efficiency of tax control activities, for better or worse. The changes to the invoicing rules, in general, and e-invoicing requirements, in particular, generated no appreciable variation of the level of controls undertaken, on the number and value of VAT irregularities identified, and on the level of non-compliance. Although quantitative data in this area are less than ideal, this was largely confirmed by the tax authorities participating to the targeted consultation. *A fortiori*, this is also demonstrated by the fact that the Directive generated no enforcement costs for the tax authorities to adapt to the new rules.

In this area, the opinion of tax authorities and stakeholders concur in saying that **there is little more that can be further obtained from the invoicing rules in terms of tax control.** The tax authorities still consider that invoicing rules should be aligned to their needs. However, this mostly implies that any further simplification should not endanger the information value of invoices for tax audit purposes, rather than introducing more stringent requirements. The attention of many tax authorities is now focused on how to get access to transaction data without having to get physical or electronic access to the invoice, that is in introducing effective reporting requirements. And indeed, reporting requirements seem to explain the decrease in the VAT Gap to a larger extent than the invoicing rules or the uptake of e-invoicing technologies. However, and importantly, not all tax authorities are longing for this type of control, and some of them mention the 'big brother' risk as a significant downside of this approach.

In this light, the idea of tinkering again with the VAT chargeability or the timing of invoice issuance is most likely outdated. The SID rules on VAT chargeability hardly affected tax control activities at all. There is little to gain in putting more effort in this area, since the information obtained from the recapitulative statements will only come, on average, two to four months after the transaction. If a higher control of intra-EU transactions were needed, the legislators would need to consider **whether and how to build a quasi-real time transaction control system**, similar to what is in place in certain Member States (Spain, Hungary) or several other jurisdictions, such as in Latin America. Such a system would obviously need to be coordinated with the ongoing discussion on the definitive VAT system for goods.

The Commission could also reconcile the approach adopted by certain tax authorities on when an invoice represents a valid document to claim VAT deduction with the stream of the CJEU jurisprudence. At Directive level, it could be specified that, ***in case of formal inaccuracies, the invoice remains a valid document, provided that the trading partner can provide to the tax authority, even at a later stage, the information needed to verify that the substantial requirements for deduction are met.*** Furthermore, it could also be re-stated that, in these cases, the tax authorities may impose penalties for inaccuracy, but have no right to refuse VAT deduction on this ground. Secondly, ***the Explanatory Notes could be updated to provide more details on how to interpret certain items of Article 226 which have created more disputes,*** for instance, the address of the trading parties, or the description of the goods and services provided. Even though these concepts may sound clear to the common understanding, they did create legal uncertainty, which could be tackled by additional guidance.

10.2.3 SME Promotion

On SME promotion by means of cash accounting, the ground for further Directive revisions seems negligible. The working of this regime is positively evaluated by stakeholders, signalling no emerging issues. In terms of a possible evolution of the company's needs, its uptake remains so limited across most of the Member States that it would be difficult to argue for its extension, and, in particular, to have it potentially covering all SMEs. The regime as it is works effectively for the few micro companies that find significant benefits from it, and it is of limited relevance (but no harm) to the others. The Member States already have in their hands two significant levers to increase its potential appeal and reduce the associated burdens. First and foremost, they could adopt the 'German' approach, which allows companies to postpone VAT payment, but not VAT deduction. This would increase the financial savings for micro companies and, possibly most importantly, free them from the obligation to monitor when their purchases are debited. Secondly, they could remove the obligation for customers of cash accounting taxable persons to also postpone deduction. Given the limited uptake of cash accounting, the removal of this obligation would hardly affect the public budget cash flow in a noticeable way. However, whatever implementation strategy is adopted by the Member States for this regime, ***the main hindering factor remains that, for most of micro companies, benefits are small, and that only certain specific companies will find cash accounting truly beneficial.***

10.3 Acting at EU level

The Study makes a clear case that the intervention generated EU added value. Acting at EU level indeed caused more than half of the benefits due to the simplification and most of those due to the harmonization process. The technological and regulatory evolution does not suggest that this situation is going to change in the near future, and an ongoing need for acting at EU level remains. Rather, ***certain 'costs-of-non-Europe' seem to emerge in the area of e-archiving rules and additional e-reporting requirements.*** These costs-of-non-Europe concern not only cross-border companies; they also fall on domestic operators and SMEs, for instance, when the e-reporting requirements are not aligned with the invoice content, or when e-invoices are subject to archiving rules that go beyond what would be strictly necessary to demonstrate their I&A. It has been discussed at some length about whether a regulatory intervention for harmonization purposes is necessary and feasible in these adjacent areas (i.e. on common additional reporting requirements, at least for intra-EU transactions), or whether non-regulatory options could be explored (the pan-European e-invoice cloud

archive). In any case, ***such a cost-of-non-Europe reinforces the conclusion that, for VAT invoicing rules and the related areas, there is an ongoing rationale for acting at EU level.***

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