Analysis of the impact of the split payment mechanism as an alternative VAT collection method

Final Report

Written by Deloitte

December 2017

EUROPEAN COMMISSION

Directorate-General for Taxation and Customs Union
Directorate C — Indirect Taxation and Tax Administration
Unit C1 — Value Added Tax

Contact: TAXUD UNIT C1
Email: TAXUD-UNIT-C1@ec.europa.eu

European Commission
B-1049 Brussels

Analysis of the impact of the split payment mechanism as an alternative VAT collection method

Final Report

LEGAL NOTICE

More information on the European Union is available on the Internet (http://www.europa.eu).

Luxembourg: Publications Office of the European Union, 2017

PDF	ISBN 978-92-79-77051-7	doi: 10.2778/649636	KP-07-17-146-EN-N

This study was carried out for the European Commission by:

Deloitte.

Authors

Johan Van Der Paal
Aili Nurk
Valentina Cilli
Benoît Vandresse
Ciara Walsh
Thomas Vanhee
Jake Consiglio
Sarah Venables
Sam Blackie
Megan Baddeley
Jelle Heyvaert

Abstract

This study designs and analyses a range of options for applying split payment mechanism as an alternative VAT collection method in both the current and definitive VAT regime. The options encompass different types of transactions (B2B, B2C and B2G) as well as different types of payment (EFTs, credit cards, cash payments).

The design of the policy options for applying split payment mechanism takes into account previous studies, ongoing VAT policy developments and examples of split payment or similar mechanisms implemented or considered for implementation within the EU and in third countries.

The analysis is based on available literature and datasets, as well as data collected especially for the study from Member States, business and their representative organisations and other stakeholders (including banks and payment providers). Data gaps have been filled with a set of proxies and (expert-based) assumptions.

The study found no strong evidence that the benefits of split payment would outweigh its costs. The main identified effects were that a wider scope of split payment would potentially provide a larger decrease of the VAT gap and hence have a positive impact on the Member States' budgets, but would also significantly increase the related administrative costs for businesses, especially when applied on broad scale.

Executive Summary

The EU Commission and the Member States are concerned about the levels of VAT fraud and avoidance in the EU. The 2016 study on the EU VAT gap (based on 2014 data) measures the total amount of VAT lost in the EU at 159.5 billion EUR, representing 14% of the total expected VAT revenue.[1, 2] A number of measures to tackle VAT fraud have been considered in recent years, focusing on the VAT collection methods that have hardly been changed since VAT was introduced in the EU[3].

This report builds on earlier analysis[4] and examines a range of options for applying split payment mechanism as an alternative VAT collection method. Taking into account other ongoing VAT policy developments, the options are analysed in both the current VAT system and in a definitive VAT regime for cross border B2B supplies[5].

The findings of the analysis found no strong evidence that the benefits of split payment would outweigh its costs. **The main identified effects were that a wider scope of split payment would potentially provide a larger decrease of the VAT gap, but would also significantly increase the related administrative costs.** However, the analysis carried out is highly dependent on the specific design of the policy options as well as on the assumptions that had to be made in order to carry out the quantitative analysis, (especially on the volume of transactions). Therefore, a different design of the mechanism for split payment (e.g. different scope or technological choices) may come to considerably different results.

Background to the study

The **main objectives** of this study were to design and assess (both in qualitative and quantitative terms) legally and technically feasible scenarios for a split payment mechanism as a VAT collection tool. In the study, both the current EU VAT legislative framework and existing international and EU experiences with split payment, as well as the future definitive VAT regime based on the destination principle were taken into account.

The **design of the scenarios** (policy options) for the split payment encompasses different types of transactions (i.e. Business-to-Business (B2B)[6], Business-to-Consumer (B2C)[7] and Business-to-Government (B2G)[8]), as well as different methods of payment (e.g. electronic transfers,

[1] EU Commission, CASE (2016), Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final report', available at: https://ec.europa.eu/taxation_customs/sites/taxation/files/2016-09_vat-gap-report_final.pdf , p. 8
[2] The latest 2017 update study on the EU VAT gap was not yet published at the time of analysis, but can be seen from here: https://ec.europa.eu/taxation_customs/sites/taxation/files/study_and_reports_on_the_vat_gap_2017.pdf
[3] EU Commission Communication on the Action plan on VAT (COM (2016) 148 final) and Communication on the Follow up to the Action Plan on VAT (COM (2017) 566 final)
[4] EU Commission, PricewaterhouseCoopers, Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries, 2010.
[5] EU Commission communication on the Follow up to the Action Plan on VAT – Towards a single EU VAT area – Time to act COM/2017/566 final, Brussels, 4 October 2017, p. 6.
[6] B2B transactions refer to transactions between businesses.
[7] B2C transactions refer to transactions between a business and a final consumer.
[8] B2G transactions refer to transactions between businesses and government entities.

transactions paid with payment cards, and in cash). It also includes a sub-option of split payment with blocked VAT bank accounts.

The analysis includes a **qualitative assessment** of the scenarios for split payment with regard to their compatibility with the current and future EU VAT regime (including possible future changes such as a national general reverse charge mechanism or the definitive VAT regime) and with the Single Euro Payments Area (SEPA) regulations. It also includes a **quantitative assessment** of the scenarios, including the impact on the administrative burden for businesses and the overall costs and benefits for the stakeholders affected. The Italian experience on split payment for supplies to public administration, as the only current example of an EU split payment regime, is analysed as a case study.

A number of **methodological tools** were applied in the process of the study. For data collection, the main tools used were: desk research, strategic interviews, survey to tax administrations of the Member States, in depth fieldwork in eight Member States and stakeholder workshops. Data on VAT revenues and VAT revenue losses in EU Member States came from Eurostat, while the EU studies on VAT gap[9] were also taken into account. For the analysis of the collected data, the main tools applied were the standard cost model (for administrative burden analysis) and cost-benefit analysis (for overall costs and benefits).

VAT policy context and problem assessment

EU VAT policy and revenue context

The current 'transitional' EU VAT regime splits every cross-border transaction into an exempted cross-border supply (i.e. an intra-EU supply) and a taxed cross-border acquisition (i.e. an intra-EU acquisition). It has been argued that such regime is *"prone to fraud and is highly complicated for some cross-border businesses"*[10]. As a derogation, some Member States have therefore asked for a possibility to introduce at a national level a generalised reverse charge mechanism (GRCM) to tackle VAT fraud. At the same time, the Commission is focussing on a solution through a general move towards a definitive EU VAT system, where cross-border B2B transactions are taxed based on the destination principle and with collection of VAT by the vendor. Outside the VAT system, the EU Single Euro Payment Area (SEPA) regulations contain specific technical and business requirements for financial transfers that are a key element of any split payment option. **Any type of split payment mechanism considered should align with the existing EU VAT regime and wider legislative context, but also be future proof.**

Problem assessment

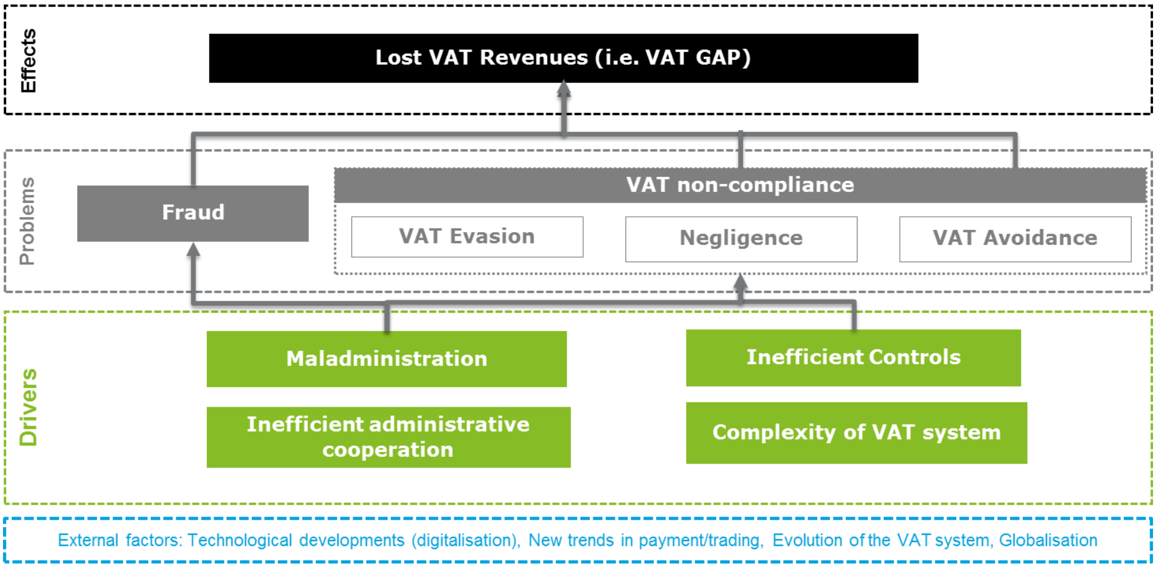
The concerns with regard to the high level of the VAT Gap in the EU (EU 159.5 billion EUR, or 14% of the total expected VAT revenue) has led to the discussion of a range of potential

[9] EU Commission, CASE (2016), Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final report, available at: https://ec.europa.eu/taxation_customs/sites/taxation/files/2016-09_vat-gap-report_final.pdf.

[10] Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on an action plan on VAT Towards a single EU VAT area - Time to decide, COM/2016/0148 final, Brussels, 7 April 2016.

solutions, including alternative VAT collection methods, such as the split payment mechanism. In order to give an illustrative view of the current environment, a **problem analysis** was carried out as part of the study. The effects, problems and drivers of the current environment are illustrated in a problem tree below:

Figure 1: Problem Tree



Source: Deloitte elaboration

Split payment mechanism as a tool to tackle the VAT gap

The introduction of a split payment mechanism could help to combat non-compliance, with the ultimate aim of improving VAT collection. The study has therefore assessed the design of a split payment mechanism based on available data with respect to VAT revenues and VAT revenue losses.

Split payment is regarded as **a measure that can combat VAT fraud and non-compliance** by removing the opportunity of suppliers to charge VAT and disappear without declaring or paying it to the tax authority ('missing trader fraud'). It deviates from the current EU VAT regime, which mainly relies on vendor-based collection of VAT and on periodical reporting and payment of VAT by registered traders.

Split-payment-like mechanisms are **currently in place in a number of countries, mainly outside the EU**. In the EU, **Italy** is currently the only country applying a limited split payment regime (to B2G transactions only). The Italian experience was specifically analysed in the study, especially as the first phase of the Italian regime has been considered by the government as successful and the regime was recently renewed and expanded.

Several other Member States, such as **Poland, Romania and the UK**, have started to consider a split payment regime. Romania has recently adopted the relevant national legislation and is already planning to bring changes into force in 2017, Poland potentially following from April 2018.

On a practical level, a split payment mechanism would change the regular VAT collection regime by **introducing on payments for taxable supplies a split between the VAT amount and the taxable base** (e.g. by two separate payments for every taxable transaction). Different designs of a split payment model are possible and a wide range of technical models were analysed as part of the study.

Split payment as alternative VAT collection method in the EU

Considerations regarding the design of policy options

The analysis of a wide range of technical split payment models resulted in a list of findings which was used as a basis for designing the policy options:

- The **supplier** is generally not a suitable splitting agent, although in certain cases it may be the only option, e.g. on B2C or cash payments;
- The **VAT payment liability** ought to be with the party to the transaction (other than the supplier) who has the necessary information on the transaction and control over the payment, i.e. the customer who is also the splitting agent (except in B2C supplies, as non-taxable persons have no VAT reporting capacity);
- **Blocked VAT bank accounts** would reduce the negative cash flow impact for businesses, but are likely not to be feasible due to added complexity and cost. However, an alternative policy option was added, to carry out limited benchmarking analysis on the features of a split payment with blocked VAT bank accounts;
- **Partial split payment** by either a transactional threshold or splitting just a percentage of VAT would also reduce negative cash flow impact. However considering the added complexity and reduction of effectiveness as an anti-fraud measure, it was not considered sufficiently feasible;
- Despite some potentially positive impact on cash flow and management of VAT payment liability, **cash based chargeability** or cash accounting was not considered necessary as a built in design element of split payment. The existing optional cash accounting schemes seem more appropriate for providing support to the businesses who require it;
- Efficient **VAT refund processes** would support the effectiveness of a split payment regime by helping to reduce the negative cash flow impact.

In addition, it was considered necessary to include **new reporting obligations** (transactional sales and purchase lists) concerning B2B and B2G supplies subject to split payment, to enable tax authorities to carry out compliance controls and match received VAT payments with taxable supplies.

Policy options

Based on the policy context, the problem assessment and the considerations presented above, a range of policy options were designed and analysed:

Table 1: List of policy options

Number	Option description
Option 0	Status quo (current VAT payment system and definitive VAT regime)
	Options based on current VAT regime
Option 1	Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)
Option 1(b)	Option 1 with blocked VAT bank account
Option 2	Option 1 combined with a generalised reverse charge mechanism in certain Member States
Option 3	Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)
Option 4	Option 3 with extension of split payment to credit card and cash payments
	Options based on Definitive VAT Regime
Option 5	Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)
Option 6	Option 5 with extension of split payment on EFT to B2C and B2G
Option 7	Option 6 with extension of split payment to credit card and cash payments

Source: Deloitte elaboration

Conclusions of the analysis of policy options

Conclusions on the use of split payment in the current VAT regime

Legislative context

Regarding the required legislative changes to the **EU VAT Directive**, it seems most appropriate to introduce split payment as a new special scheme under Title XII Special Schemes, especially if a split payment mechanism would be introduced as optional for the Member States.

Introducing split payment under the current **SEPA** regulations would not seem to be a realistic option under the second Payment Service Directive (PSD2)[11]. To put a legal obligation on banks or other payment service providers to carry out VAT split payment would require an explicit consent of the business to initiate any payments. In addition, the collection and linking of underlying information on the supply to the payments is considered technically highly challenging. In the EU countries currently applying or planning to apply split payment, this problem is tackled by either requesting customers to split the VAT or using blocked VAT bank

[11] Council and European Parliament Directive 2015(2366) on payment services in the internal market

accounts. An efficient and broad EU level application of split payment may however require it to be integrated into the standard payment flow.

GRCM and split payment were found to be mutually exclusive measures, if they would cover the same supplies. Indeed, under GRCM, the VAT amount would not be payable towards the tax authorities to the extent it is deductible.

Main advantages and disadvantages of policy options

The main advantages of split payment in the current VAT regime would be the **reduction of VAT fraud and avoidance**, which would increase by expansion of the scope of split payment.

Results of the cost-benefit analysis show that all options are expected to reduce the VAT Gap to some extent ranging from 27% to 56% reduction under the current regime. The most notable reductions under the current regime are found in the proportion of the VAT Gap made up by MTIC fraud[12], thereby confirming that split payment has the potential to significantly reduce this type of fraud. In addition, it was found that the split payment mechanism would also reduce considerably non-compliance due to new reporting requirements and increased transparency.

Table 2 shows the results of the quantitative analysis of the effect on the VAT Gap. Since it is the widest in scope, applying to B2B, B2C and B2G transactions via EFT, credit card and cash, Option 4 is regarded as the most effective option for reducing the VAT Gap overall. However a wider application of split payment is accompanied by higher costs for businesses and public bodies which increase substantially throughout the options (see below).

Table 2: Results of the quantitative analysis on VAT gap

Impacts	Option 1	Option 1(b)	Option 2	Option 3	Option 4
VAT Gap	(-)27-42%	(-)27-42%	(-)27-42%	(-)38-49%	(-)42-56%
	EUR 40.7 to 63.2 billion	EUR 40.7 to 63.2 billion	EUR 39.3 to 61 billion	EUR 54.7 to 70 billion	EUR 61 to 80.7 billion

Introduction of a split payment mechanism would also trigger **significant changes in the cash flow** from the perspective of both businesses and tax authorities. Tax authorities would have a positive cash flow impact as VAT payment would happen *in real time* per transaction rather than *ex post* on a periodical basis. However, the opposite would be the case for businesses, whose cash flow would be adversely affected by the mechanism in a very significant way, impacting directly their working capital.

Table 3 shows the results of the quantitative analysis of the effect on cash flow under the different options:

[12] Missing Trader Intra-Community Fraud (MTIC), occurs when a trader purchases goods from another Member State without VAT, charges VAT on onward domestic sale, but instead of paying the VAT to tax authority absconds with it himself, i.e. 'goes missing'.

Table 3: Results of the quantitative analysis on cash flow

Impacts	Option 1	Option 1(b)	Option 2	Option 3	Option 4
Business Cash Flow	EUR -16.9 billion	N/A	EUR -16.4 billion	EUR -23 billion	EUR -39 billion
Member State Cash Flow	EUR 10.8 billion	N/A	EUR 10.5 billion	EUR 14.9 billion	EUR 25.2 billion

The most striking impact of the split payment mechanism is the **rise of administrative costs to businesses and public bodies**. Because of the payment of VAT on a transactional basis for B2B and B2G EFTs and increased reporting requirements, business costs would increase by at least 70% and public bodies would be confronted with entirely new obligations if applied to them (Option 3).

The impact on costs for businesses is however highly dependent on the number of transactions conducted by the individual business and thus varies depending on business size and sector. Administrative costs could also be reduced with increased automation of the system (e.g. automated split payments, e-invoicing, pre-filled VAT returns), however these are likely to have very high initial implementation costs both for businesses and Member States.

While tax authorities would have improved compliance control from the detailed transactional information on B2B and B2G supplies that would accompany a split payment system, the operation of such system would lead to a significant increase of administrative burden also from their perspective.

Table 4 shows the total impact on the administrative costs of all EU businesses and public bodies, as well as administrative cost impact on one business and one public body. The last line represents the weighted average of implementation costs per business.

Table 4: Results of the quantitative analysis on administrative burden impact

Impacts	Option 1	Option 1(b)	Option 2	Option 3	Option 4
Administrative Costs (businesses & public bodies)	(+)33% EUR 98.4 billion	(+)35% EUR 100.1 billion	(+)27% EUR 94.5 billion	(+)52% EUR112.4 billion	(+)58% EUR 117 billion
Administrative Costs (1 business)	(+)33% EUR 3 428	(+)35% EUR 3 487	(+)33% EUR 3 431	(+)57% EUR 4 061	(+)63% EUR 4 225
Administrative Costs (1 public body)	N/A	N/A	N/A	6 340	6 340
Implementation costs	EUR 2 500	EUR 2 500	EUR 2 500	EUR 2 500	EUR 2 500

Considering the different impacts assessed, the **overall evaluation shows that benefits of introducing a split payment mechanism under the current VAT regime would be highly uncertain**. In fact, the benefit in terms of reductions in the VAT Gap are not unequivocally higher than the costs imposed on businesses and public bodies (both administrative costs and cash flow impacts), and are even outweighed when applied to the entire volume of transactions (such as under Option 4).

Conclusions on the use of split payment in the definitive VAT regime

The study also addressed the potential functioning of a split payment mechanism in the definitive VAT regime proposed by the European Commission [13]. In that respect, the application of split payment to domestic transactions and to cross-border supplies to non-certified taxable persons was assessed.

The application of the split payment mechanism in the definitive VAT regime would be possible for domestic transactions in the same way as in the current VAT regime. However, regarding the VAT treatment of intra-EU cross-border supplies, the changes currently proposed as key part of the definitive regime (VAT collected by the supplier) and split payment (VAT paid directly by the customer) would be conflicting, although having the same objective to tackle VAT fraud (especially MTIC fraud). A single regime throughout the supply chain (i.e. applying split payment) would seem simpler and less burdensome than a combination of the two.

Main advantages and disadvantages of policy options

The main advantages and disadvantages of split payment in definitive VAT regime would be generally the same as in the current VAT regime. We have highlighted hereafter those points where the assessment of the different split payment options deviates from the assessment under the current regime.

Under the definitive VAT Regime, MTIC fraud is expected to decrease substantially compared to the level in the current regime (by 83%), reducing overall VAT gap by 21%. This means that the potential benefit of reducing the VAT Gap and VAT fraud that can be achieved by introducing split payment in the definitive VAT regime would already be significantly reduced. Nevertheless, split payment in the definitive regime is expected to further reduce the remaining gap by at least 13% in a split payment applying to B2B EFT, up to 44% with increases in the scope of application.

Table 6 below shows the further reduction of VAT gap by different policy options.

Table 6: Results of the quantitative analysis on VAT gap

Impacts	Option 5	Option 6	Option 7
VAT Gap	(-)13-32%	(-)21-35%	(-)27-44%
	EUR 15.3 to 38.2 billion	EUR 24.9 to 41.1 billion	EUR 31.4 to 52.2 billion

[13] The Commission's Single VAT Area proposals COM(2017)567; COM(2017)568 and COM(2017)569, 4 October 2017

The **cash flow** of both businesses and tax authorities would again, as under the current regime, be impacted in opposite ways. The amounts of cash flow involved do not appear to be significantly different from the current regime.

As under the current regime, with a wider scope of application, **administrative costs** for businesses increase. Under the definitive regime, administrative costs are higher than under the current regime due to the fact that more transactions are impacted by the split payment (i.e. cross-border transactions to non-certified taxable persons).

Considering the different impacts assessed, **it is clear that also in a definitive VAT regime, the costs of the split payment mechanism, even with a limited application would outweigh the benefits significantly.** The main reason for this is that the definitive regime without split payment would reduce the MTIC fraud already by 83%, consequently limiting significantly the further potential reduction of the VAT gap by split payment.

Final conclusions

The analysis carried out illustrated the potential benefits as well as significant challenges related to the use of split payment as an alternative VAT collection method. Although split payment has high potential to reduce the VAT gap (especially MTIC fraud and non-compliance), if applied broadly across the EU, the cost of it through increased complexity of the VAT system, high administrative burden and significant impact on business' cash flow may easily outweigh the benefits. Therefore, broad application of split payment is likely to be an unattractive policy tool, given significant rise in costs for business and authorities. However, it has characteristics that are very effective in reducing certain types of fraud and therefore may be suited as a targeted measure with limited scope.

Table of Contents

1 Introduction 1
1.1 Purpose of the document 1
1.2 Objectives and scope of the study 1
1.3 Structure of the document 2
2 Methodological approach 3
2.1 Overall approach 3
2.2 Methodology and tools 5
2.2.1 Data collection tools 5
2.2.2 Data analysis methods 7
3 Policy Context of the Study 9
3.1 EU VAT Regime 9
3.1.1 Current EU VAT regime 9
3.1.2 Derogation to the current regime: generalised reverse charge mechanism 10
3.1.3 Future regime: Definitive VAT system – taxation of goods in the Member State of destination 11
3.2 VAT revenues and VAT Gap 11
3.2.1 VAT revenues in Member States 12
3.2.2 The VAT GAP 13
3.3 Single Euro Payment Area (SEPA) legislation 16
3.4 Problem Assessment 16
4 Split Payment Mechanism as a measure to tackle VAT Fraud 19
4.1 Definition of split payment mechanism 19
4.2 Previous Study on Improving and Simplifying VAT collection 21
4.3 Examples of split payment regimes 22
4.3.1 Azerbaijan 22
4.3.2 Bulgaria (pre-accession to the EU) 23
4.3.3 Other international examples and design elements 25
4.4 Italian case study 29
4.4.1 Legal background 29
4.4.2 Application mechanisms 31
4.4.3 Impacts of split payment 35
4.4.4 Recent redevelopments 39

4.5 Developments in EU Member States 40
4.5.1 Voluntary split payment in EU Member States 40
4.5.2 Poland 40
4.5.3 The UK 41
4.5.4 Romania 42
5 Considerations for the design of policy options for split payment 43
5.1 Considerations regarding the general legislative context 43
5.1.1 Current EU VAT regime 43
5.1.2 Derogation to the current regime: generalised reverse charge mechanism (GRCM) 45
5.1.3 Future regime: definitive VAT system 46
5.1.4 Single Euro Payment Area (SEPA) legislation 47
5.1.5 Key considerations on the general legislative context 49
5.2 Considerations for policy option design 50
5.2.1 Supplier as a splitting agent 50
5.2.2 VAT payment liability 50
5.2.3 Blocked VAT bank account 51
5.2.4 Partial split payment 52
5.2.5 Cash accounting 52
5.2.6 VAT refund mechanisms 53
5.2.7 Other aspects 53
5.2.8 Key considerations for designing the policy options 53
6 Policy options for split payment as an alternative VAT collection tool 55
6.1 Overview of the policy options 55
6.2 Option 0 – Baseline (Status Quo & Definitive Regime) 56
6.2.1 Status Quo Baseline 56
6.2.2 Definitive VAT Regime Baseline 57
6.3 Options based on the current VAT regime 58
6.3.1 Option 1 - Current VAT regime with split payment applying to electronic financial transfers (EFT) between taxable persons (B2B) 59
6.3.2 Option 1(b) - Option 1 with a blocked VAT bank account 68
6.3.3 Option 2 - Option 1 combined with a generalised reverse charge mechanism in certain Member States 72
6.3.4 Option 3 - Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G) 74

6.3.5 Option 4 - Option 3 with extension of split payment to credit card and cash payments 79

6.4 Options based on the definitive VAT regime 82

6.4.1 Option 5 - Definitive VAT regime with split payment applying to EFT between taxable persons (B2B) 82

6.4.2 Option 6 - Option 5 with extension of split payment on EFT to B2C and B2G 86

6.4.3 Option 7 - Option 6 with extension of split payment to credit card and cash payments 88

6.5 Overview of the policy options design 89

7 Cost-Benefit Analysis of the Policy Options 92

7.1 Presentation of the cost/benefit analysis 92

7.2 Option 0 – Status Quo 94

7.2.1 Option 0 – Status Quo (current VAT regime) 94

7.2.2 Option 0 (b) – Definitive Regime 97

7.3 Impact on the VAT Gap 98

7.3.1 Option 1 - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B) 100

7.3.2 Option 1(b) – Option 1 with blocked VAT account 103

7.3.3 Option 2 – Option 1 combined with a generalised reverse charge mechanism in certain Member States 106

7.3.4 Option 3 – Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G) 107

7.3.5 Option 4 – Option 3 with extension of split payment to credit card and cash payments 109

7.3.6 Option 5 – Definitive VAT regime with split payment applying to EFT between taxable persons (B2B) 111

7.3.7 Option 6 – Option 5 with extension of split payment on EFT to B2C and B2G 113

7.3.8 Option 7 - Option 6 with extension of split payment to credit card and cash payments 115

7.3.9 Overview of impacts on the VAT Gap 116

7.4 Impact on cash flow 118

7.4.1 Option 1 - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B) 121

7.4.2 Option 1(b) – Option 1 with blocked VAT bank account 125

7.4.3 Option 2 – Option 1 combined with a generalised reverse charge mechanism in certain Member States 125

7.4.4 Option 3 – Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)....... 128

7.4.5 Option 4 – Option 3 with extension of split payment to credit card and cash payments 131

7.4.6 Option 5 – Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)........ 134

7.4.7 Option 6 – Option 5 with extension of split payment on EFT to B2C and B2G.. 139

7.4.8 Option 7 – Option 6 with extension of split payment to credit card and cash payments 143

7.4.9 Overview of cash flow impact 146

7.5 Impact on administrative burden 149

7.5.1 Option 1 - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B) 150

7.5.2 Option 1(b) - Option 1 with blocked VAT account 153

7.5.3 Option 2 - Option 1 combined with a generalised reverse charge mechanism in certain Member States........ 154

7.5.4 Option 3 - Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)....... 155

7.5.5 Option 4 – Option 3 with extension of split payment to credit card and cash payments 159

7.5.6 Option 5 - Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)........ 160

7.5.7 Option 6 - Option 5 with extension of split payment on EFT to B2C and B2G .. 163

7.5.8 Option 7 - Option 6 with extension of split payment to credit card and cash payments 167

7.5.9 Overview of impacts on the administrative burden 170

7.6 Costs of implementation........ 173

7.6.1 Cost of adapting ERP/accounting system 173

7.6.2 Cost of training 173

7.6.3 Additional costs related to split payment 174

7.7 Overall Cost-Benefit analysis (CBA) 175

7.7.1 Option 1 - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B) 175

7.7.2 Option 2 - Option 1 combined with a generalised reverse charge mechanism in certain Member States........ 178

7.7.3 Option 3 - Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)....... 180

7.7.4 Option 4 - Option 3 with extension of split payment to credit card and cash payments 182
7.7.5 Option 5 - Definitive VAT regime with split payment applying to EFT between taxable persons (B2B) 184
7.7.6 Option 6 - Option 5 with extension of split payment on EFT to B2C and B2G 186
7.7.7 Option 7 - Option 6 with extension of split payment to credit card and cash payments 188
7.7.8 Overview of overall cost-benefit analysis 190
8 Conclusions 194
8.1 Costs and benefits per policy option 194
8.1.1 Options 1 and 1(b) - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B) 197
8.1.2 Option 2 - Option 1 combined with a generalised reverse charge mechanism in certain Member States 197
8.1.3 Option 3 - Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G) 198
8.1.4 Option 4 - Option 3 with extension of split payment to credit card and cash payments 199
8.1.5 Option 5 - Definitive VAT regime with split payment applying to EFT between taxable persons (B2B) 200
8.1.6 Option 6 - Option 5 with extension of split payment on EFT to B2C and B2G 201
8.1.7 Option 7 - Option 6 with extension of split payment to credit card and cash payments 201
8.2 Concluding remarks 202
8.2.1 Current VAT regime 202
8.2.2 Definitive VAT regime 203
Annex A - Models of Split Payment Mechanism and their high level assessment 205
A.1 Definitions used in this Section 205
A.2 The current VAT payment model 209
A.3 Split payment models for transactions between taxable persons (B2B) 211
A.3.1 Possible Splitting Agents 211
A.3.2 Model with blocked VAT bank account 221
A.3.4 Payment type possibilities 224
A.4 Split payment models for transactions between taxable persons and government entities or final consumers (B2G and B2C) 227
A.4.1 Possible splitting agents 228

A.4.2 Model with blocked VAT bank account 235
A.4.3 Payment type possibilities 237
Annex B - Methodology for Assessment of the Policy Options 238
B.1 Approach 238
B.1.1 Impact on the VAT Gap 238
B.1.2 Impact on cash flow 241
B.1.3 Impact on the administrative burden 243
B.1.4 Cost of implementation 243
B.1.5 Overall Cost-Benefit Analysis 244
B.2 General assumptions 245
B.2.1 Effective VAT rate 245
B.2.2 Time taken to implement split payment mechanism 246
B.3 Assumptions regarding the impact of split payment 247
B.3.1 Number of businesses impacted 247
B.3.2 Number of businesses registered for VAT purposes 248
B.3.3 VAT Gap in the EU 251
B.3.4 VAT revenues in the EU 263
B.3.5 Cash flow implications 267
B.3.6 Costs of implementation 268
B.4 Additional assumptions regarding the VAT definitive regime 269
B.4.1 Share of VAT Gap reduced by introduction of definitive regime 269
B.4.2 Reducing the VAT Gap 270
B.4.3 Impact on VAT revenues 271
B.4.4 Share of cross-border turnover for businesses 271
B.4.5 Share of businesses being 'certified taxable persons' 272
B.4.6 Administrative burden in the EU 272
B.4.7 Implementation costs 273
B.5.8 Cash flow impacts 273
Annex C - Methodology for Assessment of the Administrative Burden 274
C.1 Introduction 274
C.2 Objectives, scope and sources for the SCM 275
C.2.1 Summary of the SCM approach 275
C.2.2 Data and assumptions 276

C.3 Information Obligations (IOs) used for the analysis 277
C.4 Calculation of the administrative burden 278
C.5 General Assumptions 279
C.5.1 Hourly costs for the standard cost model 279
C.5.2 Frequency of IOs 280
C.5.3 Number of businesses impacted by the Policy Options 281
C.5.4 Number of public bodies impacted by the Policy Options and number of transactions 282
C.5.5 Type of business transactions impacted 283
C.6 Option 0: Baseline 284
C.6.1 Frequency of IOs 284
C.7 Option 1: Current VAT regime with split payment applying to electronic financial transfers (EFT) between taxable persons (B2B) 285
C.7.1 Frequency of IOs 285
C.7.2 Time spent on IO4a Split Payment of VAT 286
C.7.3 Time spent on IO5 Split Payment sales and purchase list 286
C.8 Option 1(b) - Current VAT regime with split payment applying to electronic financial transfers (EFT) between taxable persons (B2B) + blocked VAT bank account 286
C.8.1 Time spent on IO3 VAT Return 286
C.9 Option 2 - Option 1 combined with a generalised reverse charge mechanism in certain Member States 287
C.9.1 Number of Businesses impacted 287
C.10 Option 3 - Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G) 288
C.10.1 Frequency of IOs 288
C.10.2 Time spent on IO5 Spit Payment Sales and Purchase List 290
C.10.3 Time spent on IO3 VAT Return 290
C.10.4 Public Body Costs 290
C.11 Option 4 - Option 3 with extension of split payment to credit card and cash payments 291
C.11.1 Number of transactions treated as cash 291
C.11.2 Time spent on IO5 Spit Payment Sales and Purchase List 292
C.11.3 Time spent on IO3 VAT Return 292
C.12 Assumptions under the Definitive Regime Options 5-6 292
C.12.1 Share of businesses becoming ‘certified taxable persons’ 293

C.12.2 Share of public bodies becoming ‘certified taxable persons’ 293
C.12.3 Number of cross-border B2B transactions 293
C.12.4 Number of cross-border B2G transactions (Options 6 and 7) 293
C.12.5 Public Body costs... 294
Annex D - Detailed calculations on the administrative burden... 295
D.1 Option 0 - Baseline... 296
D.2 Option 1 - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B) 300
D.3 Overview of administrative costs for businesses in each turnover category............. 304
Annex E - Sensitivity analysis.. 306
E.1 Impact on the VAT Gap 306
E.2 Impact on cash flow – Changes in interest rates 312
E.2.1 Option 1 – Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)... 312
E.2.2 Option 2 – Option 1 combined with a generalised reverse charge mechanism in certain Member States.. 313
E.2.3 Option 3 – Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)....... 314
E.2.4 Option 4 – Option 3 with extension of split payment to credit card and cash payments.. 315
E.2.5 Option 5 – Definitive VAT regime with split payment applying to EFT between taxable persons (B2B).. 316
E.2.6 Option 6 – Option 5 with extension of split payment on EFT to B2C and B2G..... 317
E.2.7 Option 7 – Option 6 with extension of split payment to credit card and cash payments.. 318
E.3 Impact on administrative burden.. 319
E.3.1 Option 0 – Baseline 319
E.3.2 Option 1 – Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)... 319
E.3.3 Option 2 – Option 1 combined with a generalised reverse charge mechanism in certain Member States.. 320
E.3.4 Option 3 – Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)....... 320
E.3.5 Option 4 – Option 3 with extension of split payment to credit card and cash payments.. 321
E.3.6 Option 5 – Definitive VAT regime with split payment applying to EFT between taxable persons (B2B).. 322

E.3.7 Option 6 – Option 5 with extension of split payment on EFT to B2C and B2G..... 324
E.3.8 Option 7 – Option 6 with extension of split payment to credit card and cash payments 325
Annex F - Data sets to be used for CBA 327
Annex G - References 333
Publications and reports 333

Table of Figures

Figure 1: Approach to the study 3
Figure 2: VAT revenues in 2015 and 2014 12
Figure 3: VAT Gap in 2014 and 2013 13
Figure 4: Illustration of MTIC fraud 15
Figure 5: Problem Tree 17
Figure 6: VAT payment for a transaction, standard procedure 19
Figure 7: VAT payment for a transaction, split payment mechanism 20
Figure 8: X-type Bulgarian fraud scheme 24
Figure 9: the current VAT model without split payment 57
Figure 10: Cost-Benefit Analysis Overview 93
Figure 11: Option 1 - Aggregate cash flow impact for businesses 121
Figure 12: Option 1 – Average cash flow impact by Member State 122
Figure 13: Option 1 - Aggregate cash flow impact for tax authorities 124
Figure 14: Option 2 – aggregate cash flow impact for businesses 126
Figure 15: Option 2 - aggregate cash flow impact for tax authorities 127
Figure 16: Option 3 – aggregate cash flow impact for businesses 128
Figure 17: Option 3 – average cash flow impact by Member State 129
Figure 18: Option 3 – Aggregate cash flow impact for tax authorities 130
Figure 19: Option 4 – aggregate cash flow impact for businesses 131
Figure 20: Option 4 – Average cash flow impact by Member State 132
Figure 21: Option 4 – aggregate cash flow impact for businesses 133
Figure 22: Option 5 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2 135

Figure 23: Option 5 – average cash flow impact by member state under CTP scenario 1 and scenario 2 135

Figure 24: Option 5 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2 138

Figure 25: Option 6 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2 139

Figure 26: Option 6 – average cash flow impact by Member State 140

Figure 27: Option 6 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2 142

Figure 28: Option 7 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2 143

Figure 29: Option 7 – average cash flow impact by member state 144

Figure 30: Option 7 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2 146

Figure 31: Total NPV of costs and benefits for policy option 1 (2020-2019) 176

Figure 32: Overview of the annual costs and benefits for policy option 1 (2020-2019) 177

Figure 33: Total NPV of costs and benefits for policy option 2 (2020-2029) 178

Figure 34: Overview of the annual costs anf benefits for policy option 2 (2020-2019) 179

Figure 35: Total NVP of costs and benefits for policy option 3 (2020-2029) 180

Figure 36: Overivew of the annual costs and benefits for policy option 3 (2020-2029) 181

Figure 37: Total NPV of costs and benefits for policy option 4 (2020-2029) 182

Figure 38: Overview of the annual costs and benefits for policy option 4 (2020-2029) 183

Figure 39: Total NPV of costs and benefits for policy option 5 (2020-2029) 184

Figure 40: Overview of the annual costs and benefits for policy option 5 (2020-2029) 185

Figure 41: Total NPV of costs and benefits for policy option 6 (2020-2029) 186

Figure 42: Overview of the annual costs and benefits for policy option 6 (2020-2029) 187

Figure 43: Total NPV of costs and benefits for policy option 7 (2020-2029) 188

Figure 44: Overview of the annual costs and benefits for policy option 7 (2020-2029) 189

Figure 45: Model A - The current model without split payment 210

Figure 46: Model B - VAT split by the customer 212

Figure 47: Slight variation of Model B – reverse charge 213

Figure 48: Model C – VAT split by an intermediary (bank/financial institution) 215

Figure 49: Model D - VAT split by an intermediary (not bank/financial institution) 218

Figure 50: Model E – VAT split by the wholesaler 220

Figure 51: Model F – Customer split payment with blocked VAT account of the wholesaler 222
Figure 52: Model G - Cash (like) payments split 225
Figure 53: Model H – non-EFT payments 226
Figure 54: Model I - VAT split by the consumer (B2G/B2C) 229
Figure 55: Model J - VAT split by financial intermediary (B2G/B2C) 231
Figure 56: Model K - VAT split by non-financial intermediary (B2G/B2C) 233
Figure 57: Model L - VAT split by the retailer 234
Figure 58: Model M – Split payment with blocked bank account of retailer 236
Figure 59: Illustration of cash flow modelling 242
Figure 60: Cost-Benefit Analysis Overview 244
Figure 61: Effective VAT rate 246
Figure 62: Number of businesses in the EU-28 countries 249
Figure 63: VAT Gap within the EU 253
Figure 64: Estimated Gross VAT revenues within each Member State 264
Figure 65: Estimated Net VAT revenues within each Member State 265
Figure 66: Process for measuring the administrative burden 275
Figure 67: Basic SCM calculation 278
Figure 68: Number of domestic sales invoices per turnover bracket 284
Figure 69: Definitive Regime – assumptions on the number of cross-border B2G sales 294

Table of Tables

Table 1: Examples of percentages of VAT withholding in selected Latin American countries 26
Table 2: Interaction between VAT withholding and refund process 28
Table 3 : Italian case study – VAT 'horizontal' compensation 35
Table 4: Italian case study - Analysis of split payment in the period January-December 2015 36
Table 5: List of policy options 55
Table 6: Key features of preliminary policy options 90
Table 7: Policy options for cost-benefit analysis 92
Table 8: VAT-registered businesses per turnover bracket (Status Quo – Current VAT regime) 95

Table 9: Information Obligations used in the Standard Cost Model (baseline) 95
Table 10: Administrative costs for businesses (Option 0 – Current VAT regime) 96
Table 11: Types of fraud and non-compliance 99
Table 12: VAT Gap split by different types of fraud and non-compliance 100
Table 13: Option 1 – Impact on the VAT Gap 101
Table 14: Option 1(b) – Imapct on VAT Gap 103
Table 15: Option 1(b) – Imapct on the VAT Gap based on 2010 study 104
Table 16: Option 2 – Impact on the VAT Gap 107
Table 17: Option 3 – Impact on the VAT Gap 107
Table 18 : Option 4 - Impact on the VAT Gap 109
Table 19: Definitive regime: VAT Gap split by different types of fraud and non-compliance 111
Table 20: Option 5 – Impact on the VAT Gap 111
Table 21: Option 6 – Impact on the VAT Gap 113
Table 22: Option 7 – Impact on the VAT Gap 115
Table 23: VAT Gap reduction of policy options 116
Table 24: Option 1 – EU-28 cash flow impact by business size 123
Table 25: Option 3 – EU-28 cash flow impact by business size 129
Table 26: Option 4 – EU-28 cash flow impact by business size 132
Table 27: Option 5 – EU-28 cash flow impact by business size 137
Table 28: Option 6 – EU-28 cash flow impact by business size 141
Table 29: Option 7 – EU-28 cash flow impact by business size 145
Table 30: Cash flow impact for businesses and tax authorities 146
Table 31: Information Obligations deriving from the Split Payment Mechanism 149
Table 32: Administrative burden costs for businesses under Option 1 151
Table 33: Administrative burden costs for businesses under Option 1(b) 153
Table 34: Administrative burden costs for businesses under Option 2 154
Table 35: Administrative burden costs for businesses under Option 3 156
Table 36: Administrative burden costs for public bodies under Option 3 157
Table 37: Administrative burden costs for businesses under Option 4 159
Table 38: Administrative burden costs for businesses under Option 5 (Scenario 1) 161
Table 39: Administrative burden costs for businesses under Option 5 (Scenario 2) 162
Table 40: Administrative burden costs for businesses under Option 6 (Scenario 1) 164
Table 41: Administrative burden costs for businesses under Option 6 (Scenario 2) 165

Table 42: Administrative burden costs for businesses under Option 7 (Scenario 1)............ 167
Table 43: Administrative burden costs for businesses under Option 7 (Scenario 2)............ 169
Table 44: Overview of administrative costs for all options.. 172
Table 45 – Overview of bank costs per transaction 174
Table 46: Overall NPV of policy options (EUR billions) 191
Table 47: Overview of costs and benefits of Option 1-7.. 195
Table 48: Example impacts.. 240
Table 49: Total number of businesses under each policy option 250
Table 50: Components of the VAT Gap 253
Table 51: VAT Gap split by different types of fraud and non-compliance........................... 254
Table 52: 2010 study estimates for impact of a B2B split payment mechanism of different types of fraud and non-compliance 255
Table 53: Potential impact of a B2B split payment mechanism on the VAT Gap, based on 2010 study 256
Table 54: Impact of introduction of option 1 on the VAT Gap 257
Table 55: Impact of introduction of option 2 on the VAT Gap 258
Table 56: Impact of introduction of option 3 on the VAT Gap 259
Table 57: Impact of introduction of option 4 on the VAT Gap 259
Table 58: VAT Gap (alternative baseline), based on the introduction of a definitive regime260
Table 59: Impact of introduction of option 5 on the VAT Gap 261
Table 60: Impact of introduction of option 6 on the VAT Gap 262
Table 61: Impact of introduction of option 7 on the VAT Gap 263
Table 62: Net VAT revenues under each policy option... 266
Table 63: VAT Gap (alternative baseline), based on the introduction of a definitive regime270
Table 64 – Percentage of B2B turnover that comes from cross border trade 272
Table 65: Information Obligations used in the Standard Cost Model (baseline).................. 277
Table 66: Information Obligations deriving from the Split Payment Mechanism 277
Table 67: General assumption - frequency of domestic VAT return 280
Table 68: General assumption - frequency of domestic VAT Payment 280
Table 69: Number of VAT-registered businesses in turnover categories 281
Table 70: Share of transactions completed through EFT, Credit Card and Cash 283
Table 71: General Assumption - Frequency of invoicing 284
Table 72: Option 1 - Assumptions on number of transactions subject to split payment...... 285

Table 73: Option 1 – Assumptions on the time taken to complete IO5 Split Payment sales and purchase list 286

Table 74: Option 1(b) - assumptions on additional time spent on IO3 VAT Return 286

Table 75: Option 2 - assumption on the number of businesses impacted 287

Table 76: Option 3 – assumptions on volume of invoices (including B2G)............................ 288

Table 77: Option 3 – assumptions on number of businesses selling B2G 288

Table 78: Option 3: assumptions on number of split payments (including B2G and B2C sales) 289

Table 79: Option 3 - assumptions on additional time spent on Split Payment Sales & Purchase List 290

Table 80: Option 3 - assumptions on additional time spent on IO3 VAT Return................... 290

Table 81: Option 3 - IOs for Public Bodies... 291

Table 82: Option 4 - assumptions on the time spent on IO5 Split Payment Sales & Purchase List 292

Table 83: Option 3 - assumptions on additional time spent on IO3 VAT Return................... 292

Table 84: Definitive Regime – assumptions on the number of cross-border B2B sales 293

Table 85: Baseline SCM: Business Annual Turnover Category - Less than EUR 5 000 (EUR) 297

Table 86: Baseline SCM: Business Annual Turnover Category –From EUR 5 000 to EUR 50 000 (EUR)... 297

Table 87: Baseline SCM: Business Annual Turnover Category –From EUR 50 000 to EUR 100 000 (EUR)... 298

Table 88: Baseline SCM: Business Annual Turnover Category –From EUR 100 000 to EUR 500 000 (EUR).. 298

Table 89: Baseline SCM: Business Annual Turnover Category –From EUR 500 000 to EUR 2 000 000 (EUR).. 299

Table 90: Baseline SCM: Business Annual Turnover Category –More than EUR 2 000 000 (EUR) 299

Table 91: Option 1 SCM: Business Annual Turnover Category - Less than EUR 5 000 (EUR) 300

Table 92: Option 1 SCM: Business Annual Turnover Category –From EUR 5 000 to EUR 50 000 (EUR)... 301

Table 93: Option 1 SCM: Business Annual Turnover Category –From EUR 50 000 to EUR 100 000 (EUR).. 301

Table 94: Option 1 SCM: Business Annual Turnover Category –From EUR 100 000 to EUR 500 000 (EUR).. 302

Table 95: Option 1 SCM: Business Annual Turnover Category –From EUR 500 000 to EUR 2 000 000 (EUR).. 302

Table 96: Option 1 SCM: Business Annual Turnover Category –More than EUR 2 000 000 (EUR) 303
Table 97: Administrative costs for individual businesses in each turnover category 304
Table 98: Administrative costs for all businesses in each turnover category 305
Table 99: Gross VAT comparison 306
Table 100: Gross VAT sensitivity analysis – cash flow implications for businesses 308
Table 101: Gross VAT sensitivity analysis – cash flow implications for tax authorities 310
Table 102: Option 1 – EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses) 312
Table 103: Option 1 –EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities) 313
Table 104: Option 2 –EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses) 313
Table 105: Option 2 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities) 314
Table 106: Option 3 – EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses) 314
Table 107: Option 3 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities) 315
Table 108: Option 4 – EU-28 sensitivity analysis on interest rate (impact on ash flow for businesses)) 315
Table 109: Option 4 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities) 315
Table 110: Option 5 – EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses) 316
Table 111: Option 5 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities) 316
Table 112: Option 6 – EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses) 317
Table 113: Option 6 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities) 317
Table 114: Option 7 – EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses) 318
Table 115: Option 7 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities) 318
Table 116: Option 1 – Sensitivity analysis on number of transactions (Baseline scenario) 319
Table 117: Sensitivity analysis on number of transactions for businesses (Option 1) 319
Table 118: Sensitivity analysis on number of transactions for businesses (Option 2) 320

Table 119: Sensitivity analysis on number of transactions for businesses (Option 3) 321
Table 120: Sensitivity analysis on number of transactions for public bodies (Option 3) 321
Table 121: Sensitivity analysis on number of transactions for businesses (Option 4) 322
Table 122: Sensitivity analysis on number of transactions for businesses (Option 5 – Scenario 1)........ 322
Table 123: Sensitivity analysis on number of transactions for businesses (Option 5 – Scenario 2)........ 323
Table 124: Sensitivity analysis on number of transactions for businesses (Option 6 – Scenario 1)........ 324
Table 125: Sensitivity analysis on number of transactions for businesses (Option 6 – Scenario 2)........ 324
Table 126: Sensitivity analysis on number of transactions for businesses (Option 7 – Scenario 1)........ 325
Table 127: Sensitivity analysis on number of transactions for businesses (Option 7 – Scenario 2)........ 325
Table 128: Effective VAT rates 327
Table 129: VAT revenues within the EU 328
Table 130: VAT Gap within the EU-28 329
Table 131: Number of businesses in the EU-28 330
Table 132: Estimated real cost of borrowing (interest rates) 331
Table 133: VAT return and refund frequency 332

1 Introduction

1.1 Purpose of the document

This is the Final Report for the study "*Analysis of the split payment mechanism as an alternative VAT collection method*" carried out for the European Commission, Directorate General Taxation and Custom Union (DG TAXUD).

This report builds on the First and Second Interim Reports submitted to the Commission, as well as the outcome of the related meetings and stakeholders' workshops held and on the interviews with tax authorities, businesses, representative organisations and other relevant stakeholders in eight Member States selected for fieldwork. Desk research also provided relevant inputs for the analysis.

1.2 Objectives and scope of the study

The main objectives of the study are to:

- **Design** legally and practically feasible scenarios for a split payment mechanism as a VAT collection tool, considering the current VAT policy framework, as well as the definitive VAT regime (with destination principle); and
- **Assess** (both in qualitative and quantitative terms) the potential impact of these scenarios.

The study builds upon a study conducted in 2010 that considered the feasibility of alternative methods for improving and simplifying the collection of VAT through modern technologies and/or financial intermediaries[14], a VAT split payment model was assessed for Business-to-Business (B2B) goods and services purchased via electronic fund transfer (EFT).

The **scope** of this study went a step further by including scenarios for the split payment of VAT related to different types of transactions (i.e. Business-to-Business (B2B)[15], Business-to-Consumer (B2C)[16] and Business-to-Government (B2G)[17]), as well as different methods of payment (e.g. electronic transfers, transactions paid with payment cards, and in cash).

The analysis includes the **qualitative assessment** of the scenarios for split payment with regard to their compatibility with the Single Euro Payments Area (SEPA) regulation, with the current VAT regime and the definitive VAT regime. It also includes the **quantitative**

[14] PricewaterhouseCooper, Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries, 2010.
[15] B2B transactions refer to transactions between businesses.
[16] B2C transactions refer to transactions between a business and a final consumer.
[17] B2G transactions refer to transactions between businesses and government entities.

assessment of the scenarios, including the impact on the administrative burden for businesses (using the Standard Cost Model methodology) and the overall costs and benefits for the stakeholders affected (using a cost-benefit analysis approach). The **Italian experience** on split payment for public administration supplies is analysed as a case study.

1.3 Structure of the document

The document is structured as follows:

- **Section 2** provides an overview of the approach and methodology used for the study, including the main data collection and analysis tools used;
- **Section 3** presents the context of the study, including the EU VAT regime, the EU VAT revenues and VAT gap;
- **Section 4** introduces the split payment mechanism as a tool to tackle the VAT gap, and presents examples of its implementation from EU and non EU countries, including the Italian case study;
- **Section 5** presents the key considerations and elements that lead the design of the policy options for the study;
- **Section 6** describes the policy options considered in the study, both in the current and in the final VAT regime;
- **Section 7** provides the analysis of the costs and benefits of each of the policy options considered;
- **Section 8** presents the key conclusions of the analysis carried out by the study.

In addition, the document includes the following annexes:

- **Annex A:** lists all the design elements for split payment mechanisms taken into consideration while designing the options;
- **Annex B:** describes the methodology and assumptions adopted for the cost-benefit analysis of the policy options;
- **Annex C**: describes the methodology and assumptions adopted for the analysis of the administrative burden of the options;
- **Annex D**: provides the detailed calculations on the administrative burden for options 0 and 1;
- **Annex E**: provides the sensitivity analysis carried out around the impacts included in the cost-benefit analysis;
- **Annex F**: presents the datasets used for the cost-benefit analysis of the policy options and lists the information points collected as part of the study and the sources identified;
- **Annex G**: lists the references collected.

2 Methodological approach

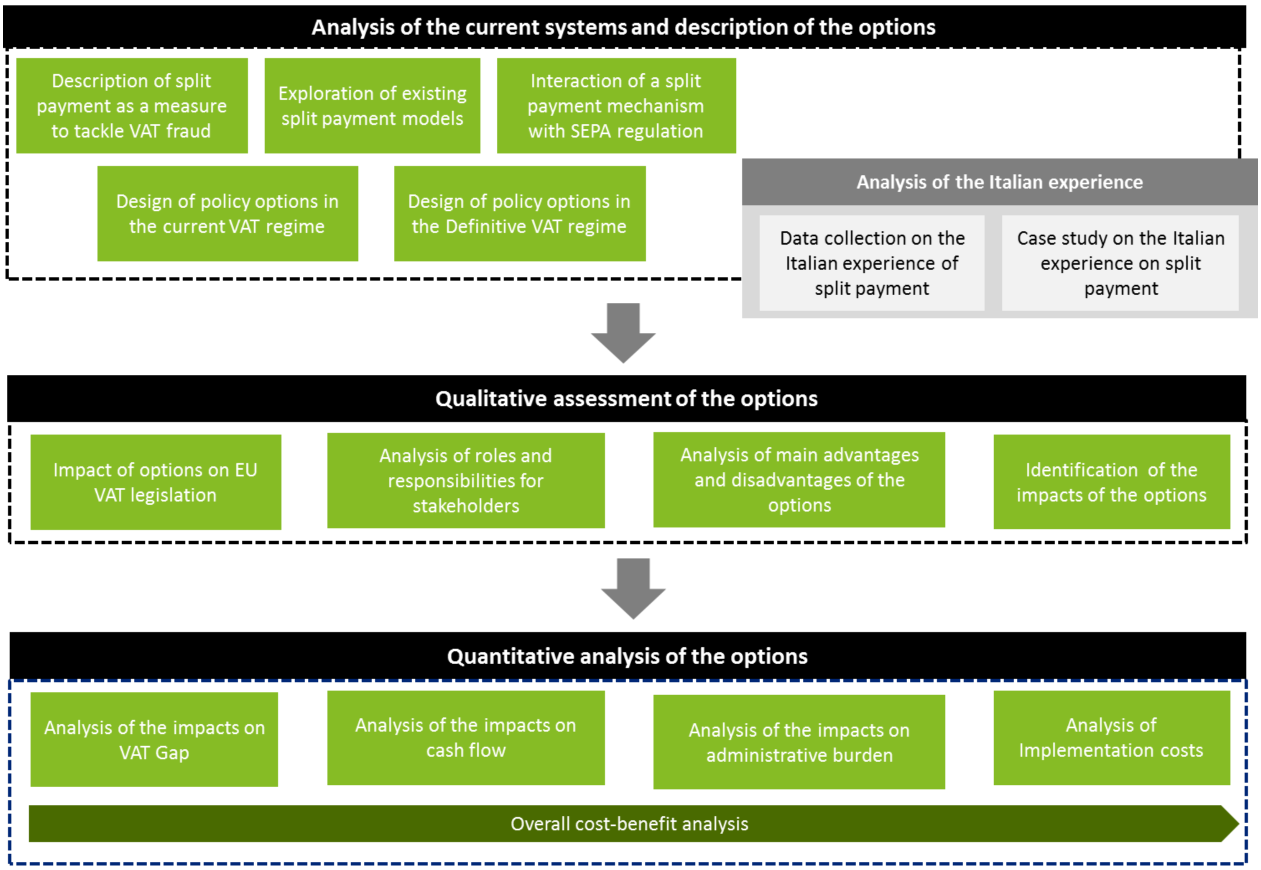
This section provides a description of the approach adopted for this study. First, the overall approach to the study is detailed, including the impacts considered in the analysis. Next, the tools and methods for data collection and analysis are described.

2.1 Overall approach

The overall goal of this study is to assess whether split payment could represent a viable VAT collection method. Given the complexity of the topic (both in the current VAT policy framework and in consideration of the definitive VAT regime), both the identification of feasible scenarios for split payment and the quantification of the related costs and benefits represent critical elements of the study.

The figure below provides an overview of the main tasks performed as part of the study.

Figure 1: Approach to the study



Source: Deloitte elaboration

The assessment of the use of a split payment mechanism to collect VAT includes the design and analysis of a large number of possible solutions, of which the legal and practical feasibility must be checked before proceeding with the analysis. The remit of this study includes:

- Providing an **in-depth description of mechanisms for split payment** in the current situation (and considering also extensions to transactions paid with payment cards, in cash and supplies to non-taxable persons) as well as in the definitive VAT regime (i.e. with application of the destination principle);
- Analysing the **Italian experience** on split payment as a case study for the identification of possible scenarios and the quantification of possible costs and benefits;
- Identifying **feasible options** (both considering legal and practical aspects) for split payments, both in the current VAT policy framework and in the definitive regime;
- Assessing their **qualitative impacts** and **costs and benefits.**

The study required gaining an in-depth understanding of the issues and interests of all the stakeholders potentially involved (e.g. the Commission and other EU institutions, national tax authorities in Member States, businesses and their associations, banks, payment processing providers, other financial intermediaries, consumers, etc.) as well as of the interactions of possible scenarios with other related issues (e.g. cash-flow management for businesses, role of banks and other financial institutions, relevant and possible trends for other forms of payment, etc.).

The identification of feasible scenarios did not rest on any existing status quo (with the partial exception of Italy). Therefore, the first crucial element of the study was the definition of feasible split payment schemes that could function in the current situation. The design of feasible options also had to broaden the scope of existing studies on the topic (i.e. the 2010 study on alternative methods for improving and simplifying the collection of VAT[18]).

Some of the issues mentioned already in the 2010 study[19] (e.g. the relevance of other payment methods in B2B transactions, the relative share of B2B and B2C transactions, etc.) were considered, as well as the compatibility with the existing legal framework (including the SEPA Regulation), and the technological developments in terms of electronic payment and their traceability. However, quite a number of additional assumptions for the assessment were necessary due to the uncertainty of the scenarios in the current situation and the definitive regime e.g. on the average number of B2C and B2G transactions conducted by businesses and the extent to which they are impacted in each of the options (see Annex C on the methodology for assessment of the administrative burden).

[18] PricewaterhouseCooper, Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries, 2010

[19] PricewaterhouseCooper, Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries, 2010

To gather the views of all stakeholders and information on potential costs involved in the options, we adopted a **participative approach** comprising:

- Interviews with EU officials
- Interviews and workshops with EU level stakeholders and experts
- Interviews with national tax authorities and businesses

We also drew on multiple pre-existing sources including publically available data and data requests to relevant authorities in each Member State.

Our approach is consistent with the Commission's **Better Regulation Guidelines**[20] (and with the guidelines for Impact Assessment in particular) and was developed in a participative and collaborative way with the European Commission.

2.2 Methodology and tools

2.2.1 Data collection tools

A number of different methods were adopted for the collection of data to feed the study, namely desk research, surveys, interviews and workshops.

Desk research

In order to collect the qualitative and quantitative data necessary to the analysis, and to validate the assumptions made, we conducted extensive research among available literature and datasets. The full list of sources used is found in Annex G.

Interviews

As part of the study, **strategic interviews** were carried out in the early stages of the study to gain a more in-depth understanding of the problem and the policy objectives, to validate the initial selection of options of the split payment model and to identify additional data sources. Such strategic interviews were carried out with relevant Commission's DGs and EU and international institutions (including DG TAXUD, Unit C.1 in particular, DG FISMA, DG GROW and OECD).

In addition, **interviews** were conducted with banks and financial institutions (including payment service providers) and selected business and financial associations to gather their input to the general design of a split payment model and its features (as part of activities for work packages 1 and 2). Interviews were carried out with representatives from:

- Independent Retail Europe;
- MasterCard;
- PayPal;
- ING;
- Google.

[20] Available: http://ec.europa.eu/smart-regulation/guidelines/docs/swd_br_guidelines_en.pdf

A broader group of similar stakeholders were consulted during two workshops.

Survey to Tax Administrations in 28 EU Member States

A **survey** was sent to **Member State tax authorities** to gain a better understanding of the current context for VAT collection in EU 28 Member States, and to collect related primary data. Overall, 23 responses have been received.

In-depth analysis in selected Member States

In accordance with the Commission, eight Member States were selected for more in-depth analysis to be carried out via on-site visits and interviews, namely:

- Austria;
- Belgium;
- Bulgaria;
- Estonia;
- Ireland;
- Italy;
- Poland; and
- Portugal.

During such fieldwork, in-depth interviews were conducted with a set of relevant stakeholders, including:

- Tax authorities;
- Business organisations;
- A sample of businesses, identified and selected via the Deloitte network and national business organisations;
- Banks and bank associations, payment service providers and
- Researchers and academics.

Overall, we conducted from 5 to 12 interviews per country.

Stakeholders' workshops

As mentioned earlier, and in accordance with the Commission's Guidelines on Impact Assessment, we had a cooperative approach to the study, discussing relevant elements for the analysis with key stakeholders as well as with the Commission. During the assignment, we organised two stakeholders' workshops to discuss and validate the initial design of the options. In addition, the detailed methodology for the cost-benefit analysis of the options was discussed with the Commission during an ad-hoc working session.).

2.2.2 Data analysis methods

Standard Cost Model (SCM)

The Standard Cost Model (SCM) methodology was applied to estimate the administrative burden for businesses (and public bodies when relevant) in order to comply with legal requirements translated into Information Obligations (IOs), in accordance with the Better Regulation Guidelines.

Our objective was to identify and quantify the costs a 'typical' business engaged in B2B, B2C and B2G transactions would face to comply with VAT-related requirements under the different Options considered, and how those costs would change with respect to the Status Quo.

Standard cost model:

Administrative burden = Time*Price*Quantity (amount x frequency)

Time: The time spent by the citizen or the employee in the enterprises to comply with an information obligation (IO)

Price: The standard cost to apply to the time spent according to the level of the employee who performs the IO

Quantity: The number of IOs to perform per year and their frequency (e.g. monthly, yearly)

The key elements (including IOs, frequency of the obligations, average costs) derive from the analysis carried out in previous studies and from in-depth interviews conducted as part of this study.

The results of such analysis are presented in Section 0, while a more detailed description of the key elements and assumptions used for this study is provided in Annex c.

Cost-benefit analysis

Cost-benefit analysis was used for the assessment of the impacts of the policy options. The impact of each of the policy options is evaluated both quantitatively and qualitatively based on its impact on the government, businesses and wider society. As mentioned earlier, the following impacts were included in the analysis:

- **The impact on the VAT Gap,** which includes for each option the potential of for reducing existing fraud and non-compliance as well as the potential for new forms of fraud and non-compliance to emerge.
- **The cash flow impacts,** which captures the repercussions on the liquidity position of businesses and Tax Authorities of the options, based on assumptions around the settlement period, the number of taxable persons and the tax revenue estimates;

- **The administrative burden,** which estimates the likely cost implications of different options for businesses and public bodies using the results of the Standard Cost Model (SCM);
- **The costs of implementation,** which allows for an estimation of the one-off cost of designing and implementing the new system, as well the annual operational costs for businesses and tax authorities, taking into account the experience of other countries (including the Italian case study) and insights from stakeholders; and
- **Overall Cost-Benefit Analysis:** the CBA takes into account the costs and benefits of each of the policy options over the timeframe of the investment, which is discounted with a social discount rate in order to compare the Net Present Value (NPV) of each option.

The results of the cost-benefit analysis are presented in Section 7, while a more detailed description of the key elements and assumptions used for this study is provided in Annex B.

3 Policy Context of the Study

This section provides an overview of the context which a potential split payment mechanism falls into. It introduces our understanding of the current landscape regarding VAT revenues and the VAT Gap in the EU as well as the current problems the split payment mechanism seeks to address.

3.1 EU VAT Regime

3.1.1 Current EU VAT regime

At the outset of establishing the Single Market, the ambition was to create a VAT system for intra-EU trade that would *"reflect the way goods were taxed at national level, thereby supporting the concept of a genuine borderless union"*[21]. This was however not achieved and the current VAT regime remains a transitional one. For transactions in respect of goods, the current regime splits every cross-border transaction into an exempted cross-border supply (i.e. an intra-EU supply) and a taxed cross-border acquisition (i.e. an intra-EU acquisition). It has been argued that the current regime is *"prone to fraud and is highly complicated for some cross-border businesses"*[22]. Cross-border services in the B2B trade are, since 2010, by default taxed in the Member State where the customer is established, whereby the payment of the VAT is done by way of a reverse charge at the level of the customer. As a result, most cross-border trade is done without actual payment of VAT between provider and customer.

For domestic transactions, the current EU VAT Directive[23] provides a legislative framework which foresees as the default position a classical VAT payment model where, in a B2B situation, the supplier charges VAT (except on intra-EU supply) and pays it periodically to the tax authority (after deduction of input VAT and reporting in its periodical VAT return). The B2B customer pays VAT to his supplier as part of the price for the supply and deducts it on his VAT return. In a B2C or B2G situation however, since the customer has no input VAT deduction, the process is different since the customer in principle has no reporting obligations.

[21] European Commission Press Release, Brussels, 30 October 2014, available: http://europa.eu/rapid/press-release_IP-14-1216_en.htm.

[22] Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on an action plan on VAT Towards a single EU VAT area - Time to decide, COM/2016/0148 final, Brussels, 7 April 2016.

[23] Council Directive 2006/112/EC

The study assesses the legislative impact of split payment on the current EU VAT regime, identifying the key legislative changes needed in the EU VAT Directive.

3.1.2 Derogation to the current regime: generalised reverse charge mechanism

While the definitive regime is not yet in place, as a derogation, some Member States have asked for a possibility to introduce at a national level a generalised reverse charge mechanism (GRCM) to tackle VAT fraud. The Commission has recently published a proposal providing a legislative framework for such derogations[24].

In the Member States applying a GRCM derogation, domestic B2B transactions would have similar effects as currently the intra-EU transactions have. More specifically, VAT would not be charged by the supplier to the customer, if the customer is a taxable person. Such a customer would then be required to account for VAT (i.e. on their VAT return calculating output VAT and deducting it as input VAT), instead of the seller. A transactional threshold has been currently proposed by Commission, limiting the application of GRCM to supplies where the invoice value exceeds the threshold of EUR 10 000.

The GRCM does not replace the already existing domestic reverse charge systems in the Member States. These already existing regimes have been introduced as optional measures based on Articles 199, 199a of the VAT Directive or as authorised derogations based on Article 395 of the VAT Directive that allow Member States to apply, sometimes on temporary basis, a reversal of liability for the payment of VAT, with the aim of closing certain types of known fraud, in particular carousel fraud.

The study assesses the potential interaction of a split payment and GRCM in the Member States applying GRCM, as well as interaction between Member States applying GRCM and other Member States.

[24] Commission proposal COM(2016)811 Amending the VAT Directive to include the temporary application of a generalised reverse charge mechanism in relation to supplies of goods and services above a certain threshold, https://ec.europa.eu/taxation_customs/sites/taxation/files/com_2016_811_en.pdf consulted 10 January 2017.

3.1.3 Future regime: Definitive VAT system – taxation of goods in the Member State of destination

As realising the ambition for a taxation system based on taxation at origin seems no longer viable, the Commission has prioritised the development of a definitive VAT regime for cross-border supplies of goods, based on taxation at the place of destination[25]. This system is deemed more suitable for the modern economy and favourable to intra-EU trade[26].

Under the definitive regime, the taxation rules according to which the supplier of goods collects VAT from its customer will be extended to cross-border transactions.[27] Intra-EU supplies would no longer be exempt, but taxed in the Member State of destination of the goods. The liability to pay the VAT would thus lie on the supplier, who can use a one-stop-shop for the payment and declaration of VAT on supplies carried out to non-certified taxable persons in other Member States. Thus the concepts of intra-community supply and acquisition are abolished, as there is no difference in treatment between an intra-community supply and a domestic supply.

It is noted that, in a first phase, an exception to the charging of VAT on cross-border transactions would be made for supplies to certified taxable person (CTP)[28], in which case reverse charge would be applied. In the longer term, this reverse charge for supplies to CTPs may be withdrawn and, depending on an evaluation of the functioning of the system, charging of VAT might even be considered for cross-border services[29].

Given the intention to move towards a definitive VAT system, where VAT would be payable on potentially all supplies within the EU, the implementation of a split payment mechanism should be future proof. The study is therefore also examining the functioning of a split payment mechanism under a definitive regime based on the general principle of taxation at destination.

3.2 VAT revenues and VAT Gap

In earlier studies, it has been proposed that the introduction of a split payment mechanism for VAT collection can help combat **non-compliance within the current VAT regime**, with the ultimate aim of increasing VAT collection. This is due to the fact that, under a split payment mechanism, VAT would no longer be paid by the customer to the supplier, who would have to report and pay the VAT to the authorities, but the VAT would be separated from the transaction price and paid (directly or indirectly) to the tax authorities. The risk of the supplier

[25] Commission Communication on the Action Plan on VAT (COM(2016)148) https://ec.europa.eu/taxation_customs/sites/taxation/files/com_2016_148_en.pdf consulted on 10 January 2017

[26] European Commission Communication on the Future of VAT, Brussels, 6 December 2011, available: http://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/vat/key_documents/communications/com_2011_851_en.pdf.

[27] Commission communication on an Action Plan on VAT COM/2016/0148 final, Brussels, 7 April 2016, p. 4.

[28] A certified taxable person is a compliant taxable person that has been certified as such for VAT purposes by the tax authority of the Member State of its establishment.

[29] Commission communication on an Action Plan on VAT COM/2016/0148 final, Brussels, 7 April 2016, Section 1

inadequately reporting output VAT or disappearing before having paid the VAT to the authorities (in case of missing trader fraud or bankruptcy), would therefore be excluded.

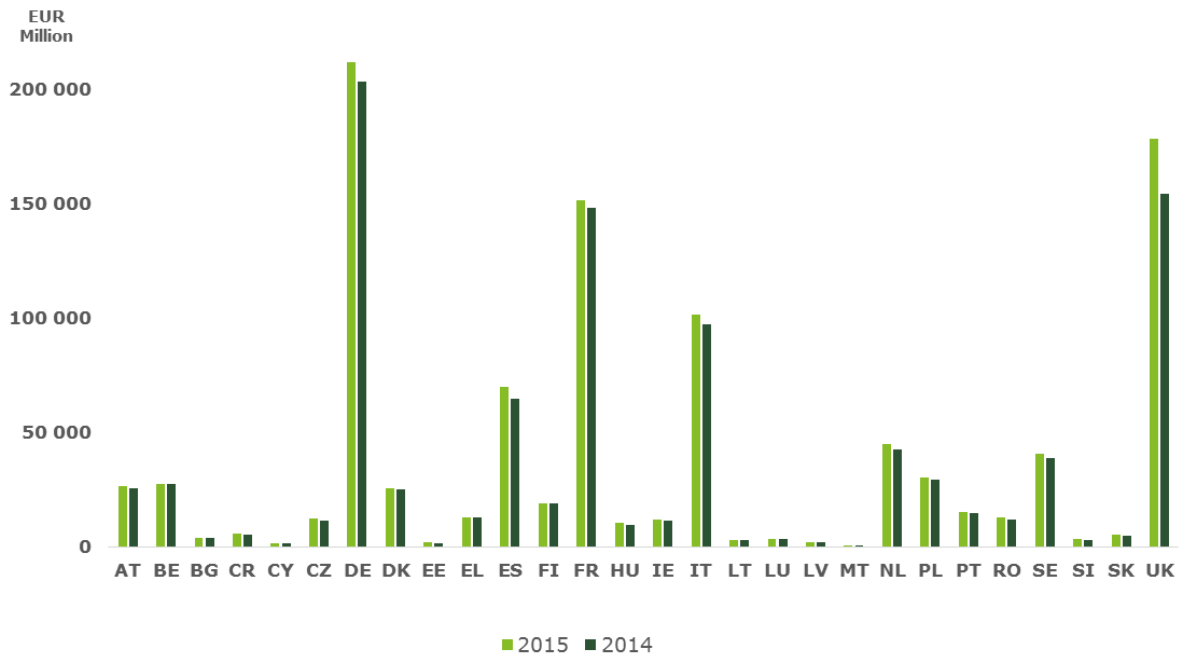
In order to assess the potential impact, it is important to understand the difference between the actual VAT revenues collected by EU Member States and the total VAT revenues owed; that is, the revenues that would be collected under 100% compliance. This difference is referred to as **the VAT Gap**. Understanding the current VAT Gap in the EU is crucial to evaluate what proportion of this gap can potentially be addressed by split payment.

This section sets out the information received on VAT revenues and the VAT Gap. The data strategy to address any identified data gaps is described in Annex F.

3.2.1 VAT revenues in Member States

According to Eurostat, total net VAT revenues of the EU28 were equal to over EUR 1 trillion in 2015, with the largest contributions from Germany, the UK and France. [30]

Figure 2: VAT revenues in 2015 and 2014



Source: Eurostat, Main National Accounts Tax Aggregates: Value added type taxes (VAT)[31]

It is to be noted that this study also required an analysis of *gross VAT revenues*, that is, the value of output VAT charged by businesses to customers and declared via their VAT return, in order to assess the cash flow impact for both government and businesses. Such data for this was not available in the public domain and, consequently, a survey conducted with EU national tax authorities also included a set of questions on this aspect. Data from the survey

[30] http://ec.europa.eu/eurostat/web/products-datasets/-/gov_10a_taxag
[31] ibid

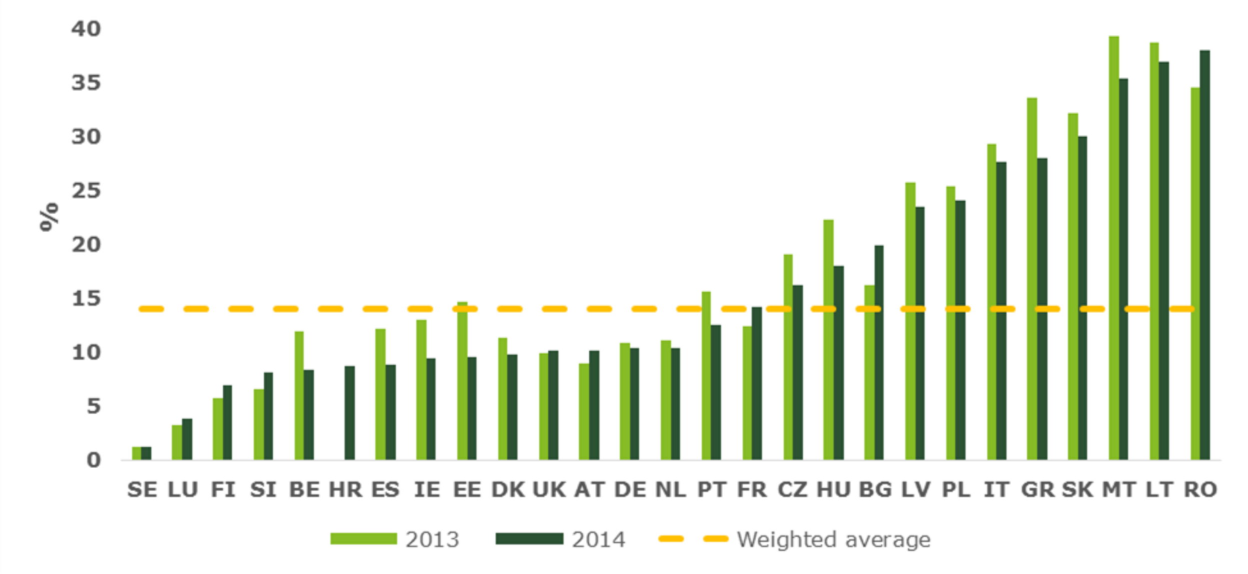
were cross-checked with available sources and used for estimation. Details on the methodology adopted are provided in Annex B – Sections B.1.1 and B.1.2.

3.2.2 The VAT GAP

The VAT Gap is normally defined as the "*overall difference between the expected (net) VAT revenue and the amount actually collected*"[32].

In 2014, the VAT Gap in the EU amounted to EUR 159.5 billion, equalling a VAT revenue loss of 14.03%.[33]

Figure 3: VAT Gap in 2014 and 2013



Source: VAT Gap Report Factsheet[34]

To measure the VAT Gap, the VAT Total Tax Liability (VTTL) is used to define the theoretical tax liability according to tax legislation. The VTTL is an estimated amount of VAT that is theoretically collectable based on the VAT legislation and ancillary regulations. The VTTL is estimated using a "top down" approach[35]. This approach takes national accounts data and VAT statements provided by Member States and estimates the VAT liability generated by different sub-aggregates of the total economy.

This approach is limited as some approximation is required given national accounts data were not developed for the purposes of monitoring tax liability. In addition, there is no standard

[32] See: https://ec.europa.eu/taxation_customs/sites/taxation/files/2016_vat_gap_factsheet.pdf and CASE (2016), Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final report, available at: https://ec.europa.eu/taxation_customs/sites/taxation/files/2016-09_vat-gap-report_final.pdf
[33] Ibid.
[34] See: https://ec.europa.eu/taxation_customs/sites/taxation/files/2016_vat_gap_factsheet.pdf
[35] See CASE (2016), Ibid., p 15.

methodology for calculating the VAT Gap and therefore individual Member States prefer using different methodologies, increasing the likelihood of inconsistencies.[36]

For the purpose of this study, data collected directly from Member States via the survey was combined with the data ,on VAT Gap as estimated by the 2016 VAT Gap study, resulting at at EUR 150.2 billion (see section 7.2 and Annex B - Section B.3.3).

Research has identified a number of factors responsible for the VAT Gap, ranging from issues affecting the ability to pay (such as insolvency or bankruptcy) to deliberate avoidance.[37] Some of these issues - for example legal tax optimisation - will not be impacted by a split payments mechanism and are therefore outside the scope of this study. However, factors such as **VAT fraud, evasion and avoidance** as well as negligence may potentially be addressed by implementing a split payment mechanism. These are discussed in turn below.

VAT Fraud and Non-Compliance

VAT Fraud

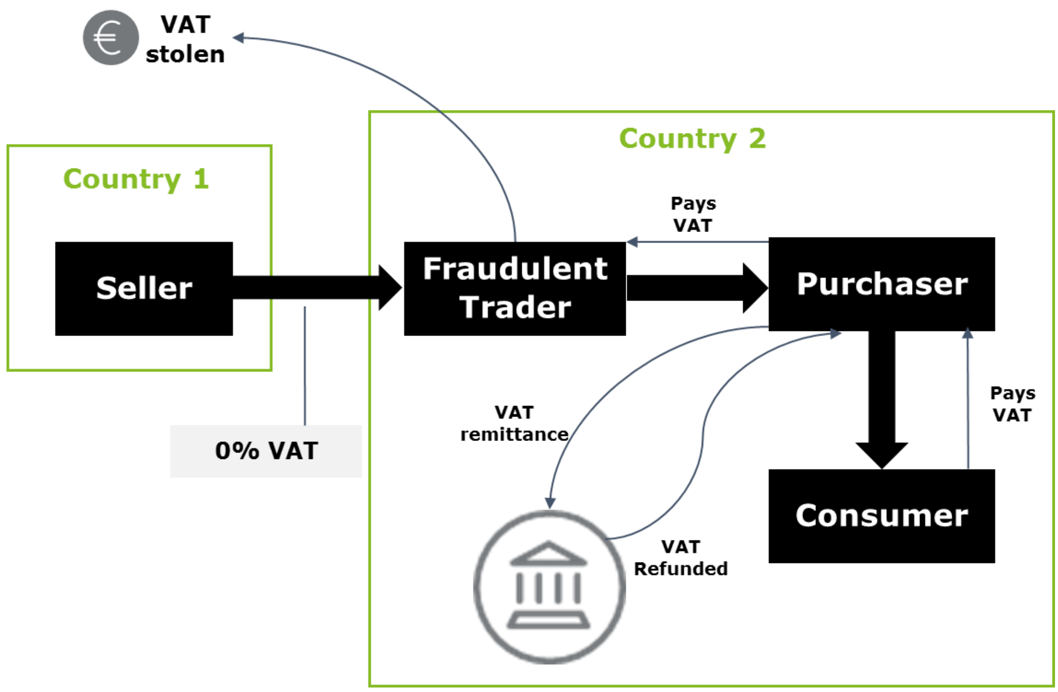
It was estimated that *"**cross-border VAT fraud** [is] responsible for revenue losses of around EUR 50 billion annually in the EU"*[38], making such fraud a significant contributor to the overall VAT Gap and highlighting the vulnerability of the current system to fraud.

Research has highlighted that **Missing Trader Intra-Community fraud** (MTIC fraud) is the single most costly kind of VAT fraud to the EU.[39] MTIC fraud occurs when a trader charges VAT on a supply to a customer but instead of paying the VAT to the relevant tax authorities, absconds with the VAT for himself. The mechanism of fractionated payments, which normally reduces the effect of VAT fraud, is circumvented by the trader by way of the intra-Community purchase transaction allowing that no VAT is charged to him by his supplier.

A related issue is **Carousel fraud;** this type of fraud is a repetitive form of the MTIC fraud, where by goods are sold cross border but within the community. As the pattern is repeated several times, the impact is more significant in comparison to the MTIC fraud in the final stage of a supply chain. In the diagram below (Figure 4), if a carousel were to occur, the consumer would essentially be another trader who can then sell back to the seller in Country A, therefore starting the cycle again.

[36] Report on VAT Gap Estimations by FISCALIS Tax Gap Project Group (FPG/041), Brussels, March 2016.
[37] For a complete list of issues that cause the VAT Gap see: https://ec.europa.eu/taxation_customs/sites/taxation/files/2016_vat_gap_factsheet.pdf
[38] European Commission - Fact Sheet, Action Plan on VAT: Questions and Answers, Brussels, 7 April 2016, available at: http://europa.eu/rapid/press-release_MEMO-16-1024_en.htm
[39] European Commission, 2015: 'Implementing the 'destination principle' to intra – EU b2B supplies of goods'

Figure 4: Illustration of MTIC fraud



Source: Deloitte

VAT revenues are lost throughout the EU as a result of MTIC fraud resulting in a negative impact on other businesses, consumers, Member States and the EU as a whole. Although exact revenues lost due to fraud are unknown[40], Eurojust stated that in 2013 alone, it dealt with 89 cases of MTIC fraud [41] and Europol estimates that MTIC fraud is responsible for a VAT revenue loss of approximately EUR 40 to EUR 60 billion annually.

VAT non-compliance: Evasion, avoidance and negligence

VAT non-compliance refers to methods employed by taxable persons to **pay less VAT than they would be generally liable to**. In some cases, this may not be deliberate; a taxable person may be negligent in either calculation or reporting of VAT, therefore either paying less than their liability or paying later (i.e. negligence).

According to the FISCALIS Tax Gap Project Group[42], VAT fraud and non-compliance can be attributed to the **behaviour of taxpayers**. This implies that regardless of the system in place, there will always be a willingness among some taxpayers to avoid their full VAT liability. This study therefore does not interpret behaviour as a **driver** of the problem in the problem

---

[40] See parliamentary question on 11 January 2016 stating that: *The Commission does not have estimates about VAT losses due to Missing Trader Intra-Community (MTIC) fraud in the EU. Furthermore, there is very limited information available on MTIC fraud in Member States,* available: http://www.europarl.europa.eu/sides/getAllAnswers.do?reference=E-2015-014169&language=EN.

[41] Eurojust News Issue No. 11 - March 2014, available: http://www.eurojust.europa.eu/doclibrary/corporate/newsletter/eurojust%20news%20issue%2011%20(march%202014)%20on%20mtic%20fraud/eurojustnews_issue11_2014-03-en.pdf.

[42] Report on VAT Gap Estimations, by FISCALIS Tax Gap Project Group (FPG/041) Brussels, March 2016.

analysis (see below). The drivers included in the problem tree (see Figure 5) refer only to actions that could potentially be adapted to curb this behaviour (i.e. are within the control of the EU and Member State administration). Thus, drivers associated with VAT fraud and non-compliance are: maladministration, inefficient administrative cooperation, complexity of the VAT system and inefficient controls.

Although combatting VAT fraud and non-compliance is within the competences of Member States, the EU has provided a framework and a set of tools for Member States to use in handling these issues in a cross-border context, namely through cooperation mechanisms and the exchange of information. As part of the VAT action plan, the EU is aiming to make the current system *"simpler, more fraud-proof and business-friendly"*[43].

3.3 Single Euro Payment Area (SEPA) legislation

The Single Euro Payment Area (SEPA) legal and regulatory framework contains several EU level legislative acts designed to drive forward the integration of the euro payments market, without frontier effect for cross-border payments. The relevant SEPA regulations contain specific technical and business requirements for cross-border financial transfers.

As financial transfers, potentially including also cross-border transfers, are the key element of any split payment option, it is essential to assess the compatibility of the split payment options with the SEPA regulations. Any potential legal or technological limitations for banks or other payment processors and payment service providers from SEPA regulations would need to be taken into account in designing the policy options for split payment, to avoid imposing obligations on financial institutions, which they cannot uphold in the light of the regulatory framework. A detailed analysis of the impacts of the SEPA regulations on the design and feasibility of split payment mechanisms can be found in section 5.

3.4 Problem Assessment

The concerns with regard to the high level of the VAT Gap in the EU has led to the discussion of a range of potential solutions, including alternative VAT collection methods, such as the split payment mechanism. In order to give an illustrative view of the current environment, we have carried out a problem analysis. The effects, problems and drivers of the current environment are illustrated below in a problem tree (Figure 5).

A **problem tree** helps establishing a de facto hierarchy between the causal elements (root of the tree) and their consequences (branches of the tree). It also helps representing visually the different elements identified and their casual relationships.

Drivers represent issues deriving from the current framework that stakeholders encounter in their activities. They are represented at the basis of the figure (i.e. the "root of the tree"). In this case, drivers of the VAT Gap effect are maladministration, inefficient controls, inefficient administrative cooperation and the design of the transitional VAT system.

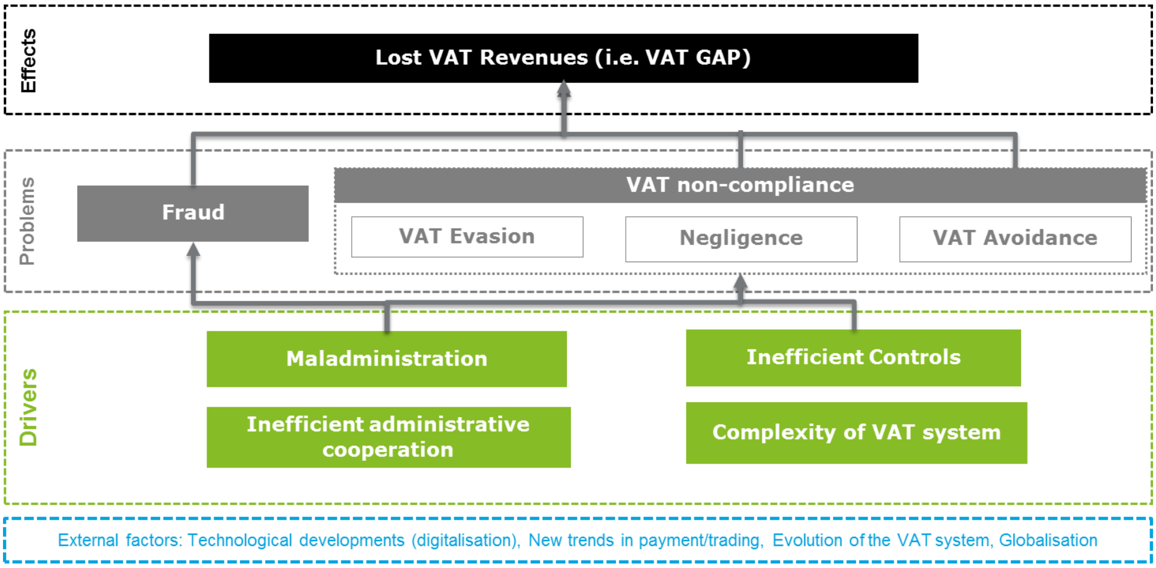
[43] http://europa.eu/rapid/press-release_IP-16-1022_en.htm

Problems are the “trunk of the tree” and constitute the main issues concerning the current context. Problems derive from the drivers identified. Problems leading to the VAT Gap in this case are tax evasion (civil offence), fraud (criminal offence), negligence on behalf of the taxable person and tax avoidance (legal tax planning).

Finally, the **effects** are the overall consequences of the problems put in a very broad sense. The sole effect here for the current environment is the lost VAT revenues because of the aforementioned problems, also referred to as the VAT Gap.

The **external factors** are represented at the bottom of the figure (in a dotted box). It is important to understand the external factors when assessing the effect of policy options on the problems identified as external factors could limit or increase positive effects of one or several options. External factors identified are technological developments (i.e. digitalisation) leading to new trends in payments/trading, evolution of the VAT system and globalisation.

Figure 5: Problem Tree



Source: Deloitte elaboration

When discussing the current VAT environment and specifically the problems of fraud and non-compliance, a number of **external factors** must be taken into account as well.

Firstly, **technological developments** play an important role in the examination of this policy area. Digitalisation in both the business context and taxation context is becoming increasingly more prominent and is expected to continue to grow with the Digital Single Market Strategy. It is important to note that in this context, digitalisation can affect the environment either positively and negatively. New technological developments can certainly help improve the efficiency of administrative tasks as well as the analysis of data by tax authorities; however taxable persons with very advanced technologies can better manipulate the system and carry out fraud or non-compliance.

Secondly, and also linked to digitalisation and globalisation, is the **increase in options for trading and payment**. Consumers increasingly use payment service providers for their transactions as opposed to traditional banking transactions. This already represents a disruption in the business environment. With changing consumer preference and technology enabled innovation, there is increased non-bank competition in the payments sector. It is important for any future taxation system to take account of rapid changes in the environment.

Lastly, the **evolution of the VAT system** will ultimately impact on any policy decisions taken now. Currently, the impending transition to the definitive VAT regime will be the biggest factor impacting future changes.[44]

[44] Deloitte 2015, Payments Disrupted: The Emerging Challenge for European Retail Banks, available: https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/financial-services/deloitte-uk-payments-disrupted-2015.pdf.

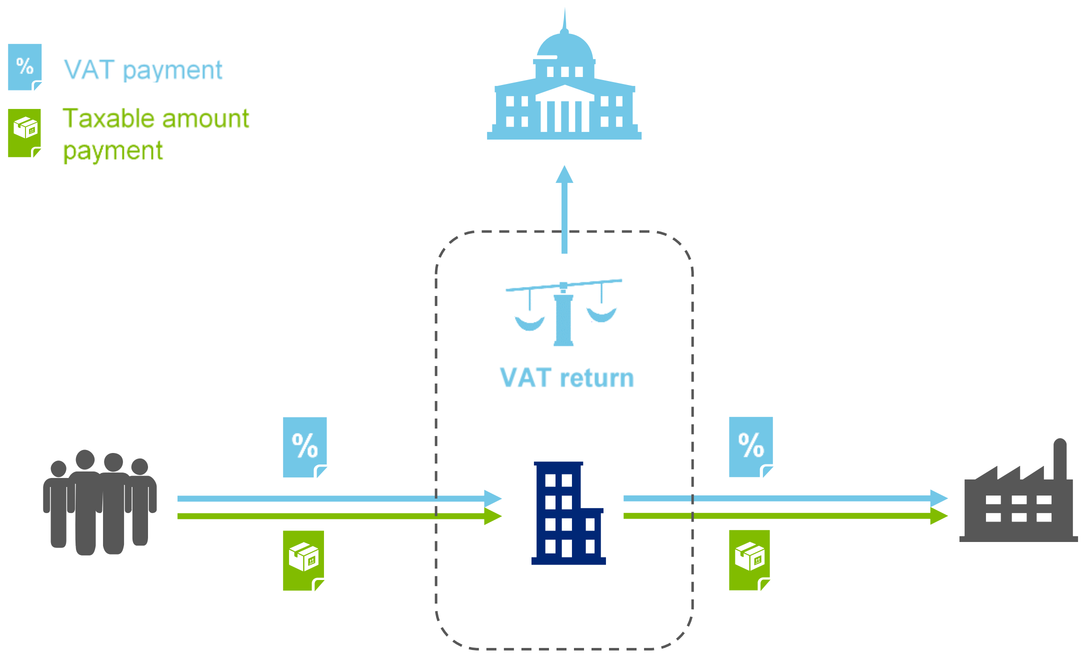
4 Split Payment Mechanism as a measure to tackle VAT Fraud

This section presents the split payment mechanism as a measure to tackle the problem of VAT gap and VAT fraud. It provides examples of its use in some third countries as well as recent developments in EU Member States (including its application to B2G transactions in Italy).

4.1 Definition of split payment mechanism

The **split payment mechanism** is an alternative VAT collection system. Under a standard procedure, for a given transaction, a VAT taxable person collects the payment of the taxable base[45] and VAT (if applicable) from its client (or a third party). The VAT taxable person then reports this transaction in its periodical VAT return. Depending on the outcome of the VAT return, VAT is due by the taxable person or it could be refunded. If VAT is due, the VAT taxable person pays the VAT to the Member State on a defined periodical basis (monthly, quarterly, etc.). See Figure 6 below.

Figure 6: VAT payment for a transaction, standard procedure

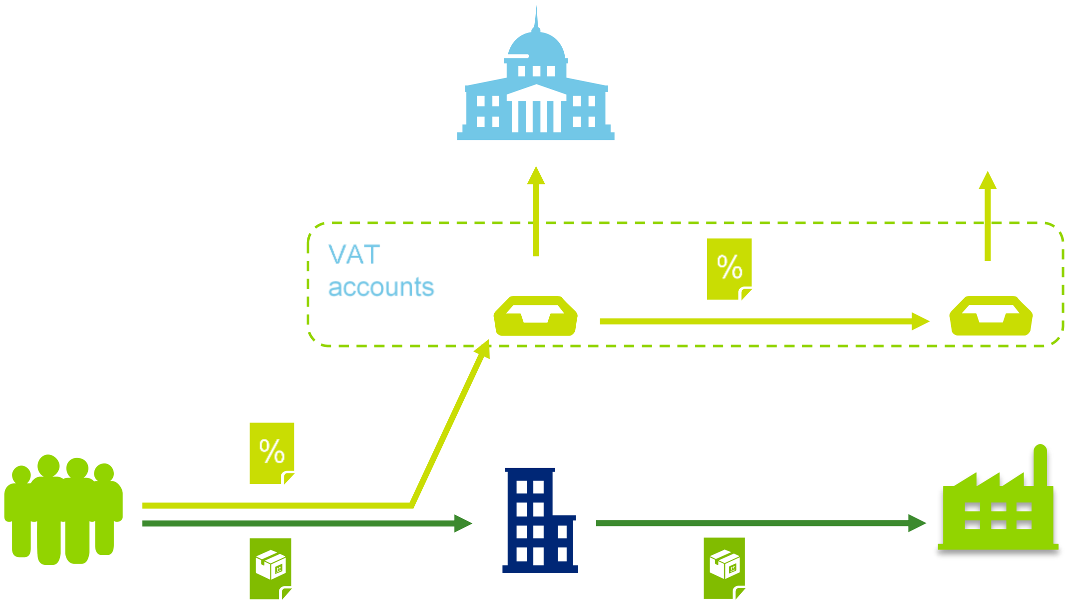


Source: Deloitte

[45] Measure upon which the assessment or determination of tax liability is based i.e. price of good or service before VAT is added.

The use of the split payment introduces a change in this (regular) chain. **As an example, one of the versions of split payment model** is a model in which the purchaser pays the VAT to a blocked bank account used specifically for VAT purposes. This bank account can only be used for paying VAT to either another taxable person's blocked VAT bank account or to the tax authority. See Figure 7 below.

Figure 7: VAT payment for a transaction, split payment mechanism



Source: Deloitte

As such, a split is made between the payment of the VAT amount due and the taxable base. Different designs of such a split payment model are possible and are discussed later in this document.

Split payment is regarded more widely as a measure that can combat VAT fraud.[46] Split-payment-like mechanisms are already in place in a number of countries[47] and the mechanism was considered in a 2010 study[48] as a viable alternative VAT collection mechanism in certain circumstances (see Section 4.2 for a summary of this study).

In its 2011 **Communication on the future of VAT**, the Commission indicated that it would analyse in more detail the feasibility of the split payment mechanism in Europe and its

[46] OECD, Consumption Tax Trends 2016: VAT/GST and Excise Rates, Trends and Policy Issues, p 34. See also the Italian case study on VAT (Section 4.4.1 of this document).
[47] See Section 4.4 for more details on split payment in other countries.
[48] PricewaterhouseCooper, Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries, 2010.

design[49]. This was part of a bigger process undertaken to modernise several aspects of the VAT System in the EU. In particular, the split payment mechanism is seen as a potential method for making the VAT system more robust and fraud-proof.

4.2 Previous Study on Improving and Simplifying VAT collection

In 2010, a European Commission study on the **feasibility of alternative methods for improving and simplifying the collection of VAT**[50] (hereinafter "the 2010 study") looked at the split payment mechanism as one of the ways to improve and simplify the collection of VAT by means of modern technologies and/or financial intermediaries[51]. The study formulated 14 possible alternatives, each a variation of one of four larger models:

- split payment model;
- VAT monitoring database;
- VAT data warehouse; and
- A system of certified taxable persons.

Regarding split payment, the study presented five alternative models:

- **Automated split payment** – blocked VAT bank account at the level of the Automated Clearing House;
- **Automated split payment** – blocked VAT bank account at the level of the taxable person's bank;
- **Automated split payment** – blocked VAT bank account at level of the tax authority's bank
- **Manual split payment** (with blocked VAT bank account);
- **Automated split payment** in case of credit card payments.

The 2010 study suggested a combination of a split payment system model with a limited VAT warehouse model as the overall policy recommendation. It concluded that the split payment system is an effective way to ensure the payment of VAT to the Member State, as missing trader fraud would become impossible. The data warehouse model would provide tax authorities with a monitoring tool for the full supply chain.

The 2010 study was however limited in **scope**. The study firstly only took electronically transferred funds ("Electronic Fund Transfer" or "EFT") into account and, to some extent, credit card payments. Secondly, it focused solely on B2B transactions. Regarding split

[49] Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on the future of VAT http://ec.europa.eu/taxation_customs/resources/documents/taxation/vat/key_documents/communications/com_2011_851_en.pdf , point 5.3.3., consulted on 4 April 2016.

[50] PricewaterhouseCoopers, European Commission Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries, 2010.

[51] PricewaterhouseCoopers, European Commission Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries, 2010.

payment alternative models, the study included only models with blocked VAT bank account (except the model for credit card payments). However, no clarification was provided on the rationale for such limitation. In addition, the study contained high level quantitative analysis on Net Present Value (NPV) and impact on VAT gap reduction, however had to make some significant abstractions of the data for their econometric modelling[52].

4.3 Examples of split payment regimes

4.3.1 Azerbaijan

A split payment model whereby cash flow effects were mitigated with the use of a blocked VAT account was introduced in Azerbaijan for B2B supplies as they rolled out an optional split payment scheme in 2008[53].

In Azerbaijan a customer pays VAT towards the “VAT deposit sub account” of their supplier. This account is to be seen as a sub-account of the general VAT deposit account of the Ministry of Taxes (i.e. it is a VAT specific taxpayer record, rather than a separate bank account). The funds on this account (records) can be used by the supplier to pay input VAT towards his own suppliers. Those funds available on a VAT deposit sub-account can however only be used for certain payments: transfers to other sub-accounts (input VAT payments), payments to the state budget (payment of VAT due according to a VAT return) and transfers on import to the State Customs Committee[54]. As the funds are readily available for all three types of payments, the cash flow impact typically associated with a split payment regime is significantly reduced.

One could ask why taxpayers make use of this optional system, as there clearly is still an impact on cash flow: VAT on the added value (profit margin) is still inaccessible in comparison to the current regime. The clear reason for adoption of the regime by businesses is however that any VAT not paid towards the sub-account of the supplier is non-deductible, resulting in VAT becoming a cost to a B2B customer[55].

To ensure that the tax authority receives all necessary information and is able to check whether any VAT due has indeed been accounted for, the use of e-invoices is obligatory. All e-invoices must be sent to the administration. As such, the tax authority knows all supplies for which VAT has been paid and all supplies for which VAT has not been paid through the sub-accounts system. The sum of the VAT on the latter category of supplies is the amount of VAT still due. Because the customer has no right to deduct VAT that has not been paid towards the sub-account of its supplier, the worst case from the tax authority perspective would be

[52] PricewaterhouseCoopers, European Commission Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries, 2010, pp. 109-141.
[53] Ministry of Taxes of the Republic of Azerbaijan. *The tax code of the Republic of Azerbaijan*. Art 175.
[54] Ministry of Taxes of the Republic of Azerbaijan. *Administrative Regulation on “Electronic VAT payments and offsetting through single deposit account” electronic service,* par 3.2.1.
[55] Ministry of Taxes of the Republic of Azerbaijan. *The tax code of the Republic of Azerbaijan*. Art 175.1

that the supplier does not pay VAT. For the tax authority, the net result would still be zero and not negative, that is if the customer has a regular full right of deduction.

As a result, the most lucrative forms of missing trader carrousel fraud in B2B contexts are eliminated. If the customer of a missing trader has not paid VAT towards the VAT account of the supplier, he has no right of deduction. Therefore, the customer will be obliged to raise the base price of his goods in his subsequent supply. In a scheme with raising prices, it will be difficult to sell the goods to a final consumer at prices significantly above market value.

The split payment regime in Azerbaijan applies a special treatment for the later corrections: in a B2B relationship a customer will see the invoice corrected on the electronic platform and the supplier will initiate a new payment from his sub-account towards the sub-account of the customer. The B2B customer can use these funds for other authorized transactions, but will not be able to get a cash refund, unless in certain circumstances or if the customer still has a refund position after three months of carry forward of the position[56]. The participants of the first stakeholder workshop noted the importance of a solution for later corrections in the system (e.g. credit notes), especially the options for refund when VAT has been paid in excess.

4.3.2 Bulgaria (pre-accession to the EU)

Bulgaria also had a working example of a split payment system with personalised and blocked VAT accounts in years 2003-2004. The system required all VAT registered businesses to open a “VAT bank account”. The account could be used only for incoming and outgoing VAT payments. Any tax amount above EUR 500 (which corresponded to a 20 percent VAT on the allowed upper limit of cash payments) had to be paid to the supplier’s VAT bank account. In return, traders, which paid to the VAT bank account not less than 80 percent of the VAT, were entitled to a refund within 45 days from filing a VAT return. A tax audit did not suspend the term. If VAT payment had been made by the refund claimant to the supplier’s VAT bank account by the end of the reporting period, authorities were not able to refuse a tax refund irrespective of whether or not there was a missing trader up the chain.

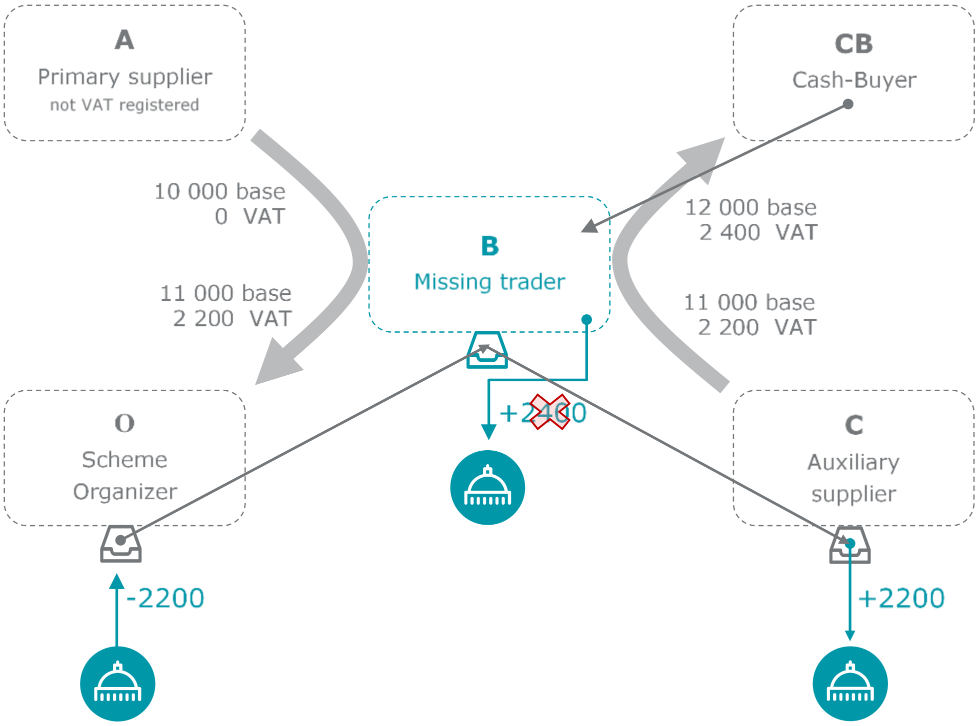
The system had the same goal as the Azerbaijani system, namely to prevent certain kinds of fraud, while at the same time reduce the cash flow impact by inclusion of VAT bank accounts. The experience of Bulgaria was however far from satisfactory as the system proved to be prone to a different kind of missing trader fraud. [57]

Konstantin Pashev, a professor in public sector administration, has published what might be the only in depth article on the subject. He describes a form of missing trader fraud in the form of an ‘X’ that was able to survive in a system where blocked VAT bank accounts were mandatory (see example below). He comes to the conclusion that in essence, the X-type fraud scheme is based on the fact that the missing trader is able to draw down the funds on his blocked VAT account and makes use of exemptions and thresholds to circumvent the preventive characteristics of a blocked VAT account system. The fraudster does this by using

[56] Ministry of Taxes of the Republic of Azerbaijan. *The tax code of the Republic of Azerbaijan*. Art 179.2.
[57] Pashev, K., *Countering cross-border VAT fraud: The Bulgarian experience*. Journal of Financial Crime, vol 14, 4, pp. 490-501.

a double supply rather than a single supply. This fraud pattern very much resembles the classic EU carousel fraud scheme.

Figure 8: X-type Bulgarian fraud scheme



Source: Deloitte

Figure 8 describes two supplies of importance: first, the supply on the left of the diagram between A-B and subsequently B-O. The second supply is between C-B and subsequently B-CB. The supply between A and B is exempted from VAT, as the supplier A is not VAT registered. In turn B sells the goods charging VAT and with a margin of 10% to O, who accounts for the VAT by paying the VAT amount on B's blocked account. So B cannot go missing with this amount of VAT, which is the goal of a blocked VAT bank account system. O gets a speedy refund as he follows all regulations. In the second supply, the purchaser B accounts for VAT by using the funds received from O, so its blocked VAT account now nets to zero. Lastly B sells the goods purchased from C to CB, who accounts for the EUR 2 400 VAT by cash payment as he is either a natural person or a non-VAT registered trader with a tax liability of under EUR 500.

In the end B, the '*missing trader*', will not transfer the received cash VAT funds which he received from B towards the tax authority, but towards O (and 'goes missing'). Therefore, when considering the payments and refund from the tax authority's perspective, the tax authority refunds EUR 2 200 towards O and received a payment of EUR 2 200 from C's blocked VAT account. As such, O succeeds to purloin the VAT amount without risk of prosecution, as one essential aspect of the Bulgarian system was the abolishment of the principle of joint liability: the authorities could no longer refuse a tax refund to O irrespective of whether or not there was a missing trader up the chain. So by introducing a missing trader, or also called a decoy, between the organiser and the fraudulent transaction, no liability was left with regards to the organiser (O).

In this respect, the Bulgarian experience demonstrates how the presence of supplies out of scope of the split payment regime and the definition of thresholds for the use of VAT accounts, either in a B2B or B2C context, may undermine the fraud preventive characteristics of the split payment mechanism. Secondly, the abolishment of the principle of joint liability prevented the authorities to limit the effects of the fraud scheme, as a potential organiser was legally protected from any prosecution as long as the organizer paid 80% of input VAT towards the blocked VAT account of his supplier(s).

4.3.3 Other international examples and design elements

There are a number of other countries that have some form of a split payment system, deviating from the normal regime where VAT is collected and paid over by the supplier.

In Latin America, for instance, split payment systems are quite popular: Venezuela, Mexico, Ecuador, Peru, Chile and Uruguay are examples of countries implementing such provisions[58]. Panama has recently expanded the reach of its split payment system[59]. Countries on other continents have also been experimenting with split payment systems. More specifically e.g. Turkey and Kenya have some form of split payment[60].

In the Latin-American countries, the term '*withholding of VAT*' is often used as an alternative to '*split payment*'. It is important to note that the terms '*split payment*', '*withholding of VAT*' and even '*reverse charge*' do not cover the same circumstances, and are not used in a consistent way across countries. The definition of *'split payment'* can be linked to the presence of its main characteristic, i.e. that in case of payment by the customer for a good or a service, the VAT applicable on that transaction goes directly to the tax authority. In other words, the supplier does not hold the VAT and only pays it to the tax authority after calculating the balance on the VAT return, but upon payment by the customer the VAT goes directly to the tax authority.

Among this general mechanism, three situations could be distinguished:

- Firstly an **intermediary** (within the payment cycle) splits the payment of VAT during the transfer of the money between customer and supplier;
- A second situation arises when the **supplier** would split the payment himself. A remark upon this scenario from a fraud prevention perspective is that this scenario is perhaps

[58] Ainsworth, R. *VAT Fraud as a policy stimulus – Is the US watching? VAT withholding, RTvat and the mittler Model*. Boston University School of Law Working Paper no. 11-08, pp. 3-4.
[59] See: http://www.mef.gob.pa/es/noticias/Paginas/AmplianmecanismosyagentesderetenciondeITBMS.aspx
[60] See: http://www.verginet.net/UserFiles/File/pusula_serisi/VAT.pdf and http://www.kra.go.ke/index.php/domestic-taxes/vat/about-vat/withholding-vat-overview

rather superfluous in the current transitional regime as missing trader fraud is certainly not prevented. The supplier still receives the VAT and could in theory still go missing before transferring any amounts to the authorities;

- Lastly also the **customer** could be asked to (manually) split the payments of the taxable amount and the VAT amount. The Azerbaijani system is a customer split system. In such a case, the customer pays VAT directly to the State, and not to the supplier.

VAT amount of the split

A key element of a split payment system is the withholding of VAT from the supplier at the moment of payment for the supply. The payment of the taxable base is made to the supplier, but the VAT is transferred directly to the authorities (not through the supplier).

The share of VAT withheld can vary across different split payment systems. The simplest idea would be to split VAT from the taxable base as a whole. However, at least in Latin America most countries only withhold part of the VAT, for example in Ecuador rates of 30%, 70% and 100% of VAT apply[61]. In Venezuela, rates of 75% and 100% of VAT are applicable[62]. In contrast in El Salvador withholding rates of 1% are applied but on the taxable amount, not the VAT amount.

Table 1: Examples of percentages of VAT withholding in selected Latin American countries

Country	VAT withholding examples
Venezuela	75%, 100% of VAT
Ecuador	30%, 70%, 100% of VAT
El Salvador	1% of Taxable amount

Source: Deloitte elaboration

These differences are important to note as they could have an impact on the size of the cash flow repercussions for businesses working within a split payment system. A split payment mechanism creates a different kind of payment flows, which could be especially detrimental when a taxable person is in a credit position (i.e. input VAT exceeds his output VAT). Essentially, when only part of VAT is split off (withheld) from the payment to the supplier, more funds stays with the businesses, limiting the cash flow impact of VAT withholding.

If fraud prevention is the ultimate goal of an introduction of a split payment mechanism, differing rates of VAT withholding could be applied to different sectors with a varying amount of fraud sensitivity. Further examples on targeting specific sector could be found from the application of a sector specific withholding system in El Salvador. Taxable persons importing beverages, tobacco and other specific products, must in some cases withhold 1% of VAT. Therefore choosing the percentage of withholding tax could be a strategic consideration.

[61] Ainsworth, R. *VAT Fraud as a policy stimulus – Is the US watching? VAT withholding, RTvat and the mittler Model*. Boston University School of Law Working Paper no. 11-08, p.4.

[62] Ronald Evans, Focus on Venezuela's VAT Withholding Regime, INTERNATIONAL VAT MONITOR, March/April 2003, p. 111.

However, partial splitting would increase the complexity of the system and a sector specific approach may raise some challenging distortions of competition in the market.

Splitting (withholding) agents and transactional thresholds

A second important characteristic of a split payment system is the agent actually carrying out the splitting or the withholding of VAT. Also in this area there are some differences between the existing regimes regarding which agent bears the responsibility of the splitting or withholding of VAT as well as the method of payment.

In Ecuador for example five types of agents are authorised to withhold VAT[63]. The first category is public entities (as also in Italy). As defined by Art. 118 of the Constitution of Ecuador, public entities can be agencies that are part of the judicial, executive and the legislative branch of the state, the autonomous public entities, official electoral commissions, as well any other entity created by the state for the provision of public services.

A second category of agent are special taxable persons (in customer position) designated as such by a tax administration ruling. In some instances these taxable persons can be private individuals or private companies. Credit card and debit card companies are a third party agent withholding VAT in Ecuador. Finally also insurance companies and other taxable persons with a specific status are the last two categories of agents authorised to withhold VAT.

In El Salvador only large taxable persons (with the status of so-called *"Grandes Contribuyentes"*) are obliged to withhold VAT[64]. When acquiring goods or receiving services from taxable persons without this status, the large taxable persons must withhold 1% of the net transaction price. Honduras has a somewhat similar system with major taxable persons, which explicitly includes airline companies[65]. This last element might be due to the size of the tourist industry in Honduras, which amounted to almost 6% of direct contribution to the overall GDP of Honduras in 2014 according to the World Travel and Tourism Council[66].

Guatemala requires exporters to withhold VAT, but unlike other Latin American countries, Guatemala allows other taxpayers to request a status as withholding agent[67].

Furthermore in Guatemala there is also a minimum transaction size for withholding VAT. On every export below a value equivalent of USD 300 no withholding is required, regardless of the payment method. In the public sector this limit is higher at an equivalent of USD 3.600. Application of transaction threshold can be seen also as a separate element of the split payment system.

In conclusion, there seem to be many variations between the designs of existing VAT withholding systems. Some countries seem to apply a sector specific approach, some apply

[63] Ainsworth, R. *VAT Fraud as a policy stimulus – Is the US watching? VAT withholding, RTvat and the mittler Model*. Boston University School of Law Working Paper no. 11-08, p.4.
[64] Art 163, Codigo Tributario El Salvador, http://www.asamblea.gob.sv/eparlamento/indice-legislativo/buscador-de-documentos-legislativos/codigo-tributario.
[65] Executive Decree 215- 2010.
[66] See: https://www.wttc.org/-/media/files/reports/economic%20impact%20research/countries%202015/honduras2015.pdf
[67] See: http://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-guatemalahighlights-2016.pdf

thresholds based on transaction amount and the withholding rates (share of VAT) differ quite significantly. However, the use of withholding agents seem to have some clear parallels: credit and debit card companies (as intermediaries), together with public entities and sometimes large companies (as customers) seem to be the traditional withholding agents.

Refunds and accessibility of output VAT payments

Split payment systems ensure faster payment of (part of) VAT to the tax authorities. However the process of input VAT recovery (in credit situations) does not necessarily change with the introduction of a split payment system. As this creates a cash flow gap, a third element to consider when comparing split payment mechanisms and their impact on businesses in different situations, is the way businesses can access the VAT funds otherwise available to them based on customer payments for output transactions.

One way of mitigating this cash flow gap, is to have highly efficient VAT refund systems. In South America, the absence or complexity of VAT refunds is a significant downside of the withholding regimes, leaving in some countries large businesses with ever increasing credit positions, which they cannot recover.

Another option is the introduction of a blocked VAT account, as was the case in Bulgaria and Azerbaijan, which enable better use of funds, but increase complexity and cost of the system.

There would also be an interaction with the percentage of VAT withheld (see above in 'VAT amount of the split'). The higher the VAT share actually split off, potentially the higher the refunds will be in practice. If only 10% of VAT is already transferred off towards the authorities, only 10% will need to be accounted for as "previously paid VAT" in the VAT returns. If however 100% would be split, it is likely that for a lot of companies, the output VAT already paid by splitting would surpass the VAT due (taking into account the deductible input VAT). Therefore the chances of a positive refund position are likely to increase and the size of a possible cash flow gap would widen. The table below exemplifies the issue:

Table 2: Interaction between VAT withholding and refund process

	100% withholding	50% withholding	0% withholding
VAT due	20	20	20
VAT split off (previously paid)	-20	-10	0
VAT deductible	-10	-10	-10
Resulting net VAT due (negative is refund)	-10	0	+10

Source: Deloitte elaboration

Information flows

In case of a split payment mechanism, there is usually an extra need for information from one or multiple parties in the supply chain. When using an intermediary for a split, be it a financial institution or not, this intermediary has a need for information. That need is caused by the fact that the amount of VAT to be split off, is to be determined. Even in a fairly simple model (e.g. with fixed withholding rate on full amount of all supplies), the splitting agent would need to know which monetary transfers reflect supplies. Extra data transfers or at least access to data, is therefore a factor of consideration when comparing split payment models. The fact that different rates and exemptions might apply, raises the complexity of the information considerably.

A second situation where information is needed are cases where the supplier is liable for VAT but the customer/other party pays VAT towards an account not owned by the supplier (e.g. directly to tax authority). In such cases the supplier will want to check the correctness of the payment by the customer or even the payment as such.

In addition, tax authorities would need further information on the split VAT amounts, especially where liability still lies with supplier, but also in regimes where not all VAT is split or not all transactions are covered, in order to enable efficient compliance control.

Therefore, most existing split payment or VAT withholding regimes contain requirements for additional information exchange with tax authority and between the parties of transactions. Most Latin American countries require separate withholding VAT returns to be submitted and apply additional requirements for invoices, such as reference on VAT withholding (sometimes combined by self-billing or withholding certificate by withholding agents/customers). A requirement to use e-invoicing (accessible by tax authorities) has been added in split payment regimes in Italy (see below) and Azerbaijan (see above), to ensure that tax authorities receive also transactional information, sometimes in real time.

4.4 Italian case study

Italy has introduced a split payment system as of 1 January 2015 for payments to public authorities[68]. It represents the only example of (partial) application of split payment in the EU at the time of finalisation of this study. The Italian experience may therefore provide an example of how a split payment could work in the current VAT system.

4.4.1 Legal background

Italy was permitted by the Council of Ministers (ECOFIN) to apply a derogation under Article 395 of Directive 2006/112/EC[69]. The derogation is permitted as from 1 January 2015 to 31 December 2017 and includes a derogation from Articles 206 and 226 of the VAT Directive with

[68] Law 23/12/2014, n. 190 (Stability Law)
[69] See Council Implementing Decision (EU) 2015/1401 of 14 July 2015 (OJ L 217, 18.8.2015, p. 7).

regard to value added tax (VAT) payment and invoicing requirements for supplies of goes and services made to public authorities. The legislative provisions applied by Italy introduced the split payment and broadened the application of the reverse charge mechanism[70].

In February 2017, Italy requested the prorogation of the application of the derogation under Article 395 and to expand the scope of its application to supplies of goods and services to companies controlled by central and local public authorities and to a list of companies listed to the stock exchange[71].

The Council authorised the prorogation of the derogation from Articles 206 and 226 of the VAT Directive and the expansion of its scope to companies controlled by central and local public authorities and to the list of companies listed to the stock exchange[72]. The prorogation and expansion of the derogation have been authorised from July 1 2017 to June 30 2020[73].

Based upon the extended derogation, the Italian Law Decree n° 148/2017 provides that, starting from 1 January 2018, the split-payment regime will be extended to supplies of goods and services rendered to additional categories of public bodies (such as public economic bodies, special companies, foundations, etc.) and of their subsidiaries.

Practically speaking, the split payment mechanism will apply on following supplies:

- As regards the transactions invoiced from July 1st, 2017 until December 31st, 2017:
  - Public administrations should be identified making reference to the list published from ISTAT in the Official Gazette dated September 30, 2016, no. 229;
  - Controlled companies and companies included in the FTSE MIB index should be identified making reference to the ones already resulting at April 24, 2017 (as resulting in the lists published in the MEF website);
- As regards the transactions invoiced as of 2018 onwards:
  - Public administrations should be identified making reference to the list published from ISTAT in the Official Gazette within September, 30 of the previous year;
  - Controlled companies and companies included in the FTSE MIB index should be identified making reference to the ones resulting at September 30 of the previous year (as it shall be temporarily provided in the list published in the MEF website within the following October 20, and within November 15, of each following year definitively).

[70] See: http://www.dt.mef.gov.it/export/sites/sitodt/modules/documenti_en/analisi_progammazione/strategia_crescita/2014_A_turning_point_for_Italy.PDF

[71] COM(2017) 169 final, Proposal for a Council Decisions authorising the Italian Republic to apply a special measure derogating from Articles 206 and 226 of the Directive 2006/112/EC on the common system of value added tax.

[72] See Council Implementing Decision (EU) 2017/784 of 25 April 2017 (OJ L 118, 6.5.2017, p. 17–19)

[73] Ibid.

4.4.2 Application mechanisms

Scope of application

As per the design of the system, suppliers continue to charge Italian VAT on goods and services supplied to Italian public authorities. These customers then 'split' the payment of the invoice: they pay the taxable amount to the suppliers, and the VAT to an allocated VAT bank account of the Treasury.

Such a measure is combined with the **electronic invoicing obligation** for purchases made by public administrations (according to which all suppliers of a public administration should issue electronic invoices to it).

In the months following the introduction of these measures, Italian tax authorities clarified the **modalities for the application**[74]. Tax authorities stated that the new payment system applies to a broad definition of 'public authorities'. It includes Italian public administrations as defined in the VAT law (e.g., central, regional and local public authorities, public universities, public hospitals and social security bodies, chambers of commerce). In addition, Italian authorities have clarified that the new payment system applies to these institutions irrespective of whether they are acting in their commercial or institutional capacity in making the purchase. On the other hand, the split-payment mechanism does not apply to social security bodies that are not of a public nature, nor does it apply to non-economic public entities (e.g. research institutes, independent administrative authorities such as AGCOM (Guarantee Authority for Telecommunication systems[75]), regional agencies for environmental protection, etc.

In addition, the split payment mechanism applies irrespective of whether the eligible public administration is acting in its commercial or institutional capacity in making the purchase (i.e. whether acting as a taxable person or not). In other words, the sole status of the public administration entity determines the application, not what the goods or services are destined for.

Available data for 2015 show that the application of the split payment has involved about 40 000 public authorities and 280 000 suppliers, and about 300 000 transactions[76]. These correspond to about EUR 10.6 billion in value of invoices and to about EUR 7.2 million of paid VAT[77].

Tasks and costs for public authorities

When it was introduced, the split-payment mechanism generally applied to all taxable supplies of goods and services supplied to eligible public authorities. However, specific exceptions apply, such as:

[74] Circolare 15/E of April 13 2015 by the Italian Revenue Agency (Agenzia delle Entrate)
[75] See: https://www.agcom.it/
[76] Interview with Italian tax authorities
[77] Interview with Italian tax authorities.

- Transactions where there is no liability for the payment of VAT (e.g., VAT-exempt supplies, supplies outside of the scope of VAT and supplies certified by a ticket or a simple receipt);
- Supplies subject to the reverse-charge mechanism;
- Supplies of professional services (e.g., services rendered by lawyers and engineers)[78].

To apply the split payment system, the customers for which the split payment mechanism applies (including the public administration that make purchases for 'commercial purposes') must record the relevant invoices in their VAT purchases ledgers. Recording must be done by the 15th day following the month when VAT becomes due, but with reference to the previous month. Consequently, VAT paid via the split-payment mechanism is offset with deductible VAT resulting from the same purchases and from others carried out in the reference month.

Public administrations that carry out purchases for 'institutional purposes' (i.e. activities of public authorities which are out of scope of VAT) cannot use such VAT credit to compensate possible VAT debits deriving from transactions carried out while acting in their commercial capacity. The corresponding VAT amounts have to be transferred from the bank account of the authorities to the Italian Central Bank (or other credit institutions) in one of the three following ways:

- On a one-off basis, by paying the VAT due separately for each invoice as the VAT becomes payable;
- Daily, by paying the total VAT for all the invoices for which VAT has become payable on that day;
- Monthly (on the 16th of each month), by paying for all the invoices for which VAT has become payable during the previous month.

The functioning of the split payment is strictly inked to the use of **electronic invoices** for transactions with public authorities. Public authorities are all registered to the SDI ('*Sistema di Interscambio*'), an IT system managed by the Italian Tax Agency, which is used to send and receive all invoices to public authorities, manage related errors, messages and controls on format and information on the invoice[79]. Public authorities (and each department within them) are identified by a unique code, which is included in the invoice by suppliers, together with the indication that the transaction is subject to split payment (indicated by an 'S' field on the invoice).

To be able to use the SDI, public authorities (already registered to the IPA – Registry of Public Authorities[80]) had to enable all their departments/functions to receive electronic invoices (i.e. access and use the SDI) and link them to the SDI.

Public authorities download from the SDI the invoices received on a regular basis (e.g. daily, or more often in case of large organisations), register them in their ledgers and control them

[78] This last exception does not apply as of 1 July 2017. Based on the most recent legislative provisions, professional services provided to public authorities are subject to split payment and electronic invoicing obligations (See Decreto-legge 24 aprile 2017, n. 50)
[79] See: http://www.fatturapa.gov.it/export/fatturazione/it/b-1.htm
[80] See: http://www.indicepa.gov.it/documentale/index.php

(e.g. whether the split payment is applied correctly by the suppliers, whether the correct VAT rates are applied, etc.). If the invoices are correct, there are registered for payment. When the payment is due, the split of the VAT amount is carried out as described above.

In addition, public authorities have the **obligation to communicate** to the Italian Tax Agency all payments of electronic invoices carried out on a monthly basis (for reconciliation purposes). On a quarterly basis, public authorities (such as municipalities) publish the list of payments carried out in that period.

One-off costs have been encountered by public authorities to train their personnel to the tasks and obligations related to the split payment mechanism of about EUR 500 (e-Learning module). IT costs related to split payment have been included in the updates provided under the standard provider's contract, as they relate to updates mandatory by law.

Similarly, the costs sustained by the Italian Tax Agency to adapt the central IT system to the split payment mechanism are considered negligible, especially when compared to the large effort of setting up the electronic invoices system.

Tasks and costs for suppliers of public authorities

The introduction of the split payment mechanism required suppliers of good and services to adapt their invoicing systems (as electronic invoicing to public authorities was introduced separately), but did not affect their invoicing procedures.

The obligation for businesses to **communicate on a quarterly basis data of all invoices** issued and received to tax authorities has entered into force on January 1 2017. Such communication is carried out electronically[81].

The main difficulties (and costs) have been encountered in the first 4-5 months after the introduction of the split payment mechanism, when the exact scope of the provision was not entirely clear and the internal systems and procedures had to be adapted.

The application of the split payment to transactions with the subjects falling under the split payment rules, including the public authorities (which also relates to the electronic invoicing) has led to **one-off costs** for businesses providing goods and services to public authorities, which include software updates and training for personnel. Such costs are not considered particularly high by the businesses interviewed, ranging from EUR 1 200 for very small businesses to EUR 15 000/EUR 20 000 for large businesses.

The impacts on cash flow of split payment have led however to a partial shift in the businesses' **practices to obtain VAT reimbursements**, with more businesses applying for compensating mechanisms.

[81] Guidance provided by the Italian Tax Agency allows businesses to submit the information required as a simple html file, or even to integrate such function in their ERP systems.

Under the Italian legislation, VAT credits (annual or quarterly) can be claimed under two different mechanisms, i.e. by reimbursement or by compensation (up to the annual threshold of 700 000 EUR fixedby the Law).

The VAT credit can be asked for refund only under condition that the amount is higher than EUR 2 582.28 and specific conditions provided by the Law are met (e.g. businesses operating in sections where output VAT is structurally lower than input VAT). VAT credit lower than EUR 2 582.28 can be asked for refund only in case of closing of business activity.

In case of reimbursements (either annual or infra-annual) for a VAT credit higher than EUR 30 000, the VAT refund can be obtained without the submission of a bank guarantee where the VAT credit is certified (by Individuals who based on specific Italian Tax Legislation are authorized to release the VISA certification or by the audit team under some specific circumstances) and the company release the certification of the capital and social security conditions required by the legislation.

Furthermore, if considered 'at risk' (e.g. business active for less than two years, businesses closing their activities, businesses found non-compliant in previous audits), the business has to provide a guarantee (either Government bonds or bank guarantee): the laws provides a list of preventing situations which exclude the possibility to benefit from the exoneration from the bank guarantee.

VAT can be compensated either '**vertically'** (i.e. with other VAT debit) or '**horizontally'** (i.e. with other type of taxes, including social contributions for employees). VAT vertical compensations are not subject to specific limits, while horizontal compensations (allowed up to the annual threshold of EUR 700 000 provided by the Law) are subject to specific requirements depending on the amount of VAT credit claimed back.

The table below provides an overview of the characteristics and requirements for VAT horizontal compensation and of the related costs for businesses as emerged from the interviews during fieldwork.

Table 3 : Italian case study – VAT 'horizontal' compensation

VAT credit	Time period	Requirements	Related external costs
VAT credit below EUR 5 000	Annual credit	No prior declaration Immediate use	No specific costs
	Infra-annual credit	Prior declaration[82] Immediate use	EUR 50-100 each
VAT credit above EUR 5 000	Annual credit	Prior declaration with compliance certificate Usable as of day 10 of following month Online procedure only F24 form submitted 10 days after prior declaration	EUR 400-500 each plus 1%-2% of the amount of the VAT credit claimed
	Infra-annual credit	Prior declaration with compliance certificate Usable as of day 10 of following month Online procedure only F24 form submitted 10 days after prior declaration	EUR 400-500 each

Source: Deloitte elaboration from Confartigianato Informativa N. 38/2016 and interviews

Compensating mechanisms (and horizontal compensation in particular) are interesting for businesses, as they allow reducing the cash-flow impacts within each reporting period, as VAT credits can be used to reduce other expenses for taxation obligations.

4.4.3 Impacts of split payment

Impacts for VAT Gap and public accounts

The objective of the measure was to facilitate VAT collection and reduce fraud. In principle, the introduction of split payment should lead to an increase in VAT revenues, provided that the purchaser is more compliant than the seller. This condition is *de facto* met in the Italian application, as public authorities are considered VAT-compliant by definition[83].

The ex-ante analysis carried out by the Italian Tax Agency and the Ministry of Economics and Finance estimated the increase of VAT revenues at about EUR 1 billion for the first year.

[82] A declaration to be presented by businesses before they use the VAT credit, stating that they intend to use such VAT credit for compensation. See: http://fismicterni.it/index.php/fiscali-news-132/1354-dichiarazione-preventiva-per-l-iva

[83] Carfora A., Marigliani M., Pisani S., Spingola A. (2017) Gli effetti dello split payment sulla compliance IVA, Argomenti di Discussione, Agenzia delle Entrate, p.5

Data from 2015 and 2016 show a net increase in VAT revenues directly attributable to split payment of approximately **EUR 2.5 billion for 2015**, and **EUR 1 billion for 2016**, for a total cumulated impact of EUR 3.5 billion[i]. Such figures relate to net VAT impacts, already discounting for VAT reimbursements and compensations. In fact, data from the first two years of application of the split payment mechanism show a net benefit for the first year higher than what was initially estimated (EUR 2.5 billion instead of EUR 1 billion), as the ex-ante study under-estimated the initial effect of the implementation of the measure. The ex-ante estimates for the following years are in line with the data collected.

The table below provides an overview of the most recent analysis on the components of such net effect.

Table 4: Italian case study - Analysis of split payment in the period January-December 2015

	Effect on cash flow in 2015 (EUR million)	**Effect on cash flow in 2016 (EUR million)**	**Overall effect (EUR million)**
Items reducing VAT revenues			
Lower VAT debit of suppliers	3 089	376	3 465
Higher VAT compensations	499	654*	1 153
Higher VAT reimbursements	573	1 234	1 807
Purchases subject to reverse charge	662	0	662
(a) Total	**4 822**	**2 264**	**7 086**
Items increasing VAT revenues			
VAT from split payment from tax authorities	7 287	3 292	10 5789
(b) Total	**7 287**	**3 292**	**10 5789**
Net impact			
(b) - (a)	***2 456***	***1 028***	***3 493***

* The figure includes the estimated impact of VAT compensation for the period January and February 2017
Source: Carfora A., Marigliani M., Pisani S., Spingola A. (2017) Gli effetti dello split payment sulla compliance IVA, Argomenti di Discussione, Agenzia delle Entrate

As mentioned before, the introduction of split payment has affected the modalities that businesses use for claiming back VAT credits, with an increase in VAT compensations (both 'vertical' and 'horizontal' compensations).

Data from 2015 show a 31% increase in VAT compensations for 2015, which amount to approximately EUR 12.3 billion in total in 2015. VAT compensations directly linked to split payment have been estimated to EUR 1.2 billion in 2015, of which EUR 652 million are claimed and paid in 2016[84]). The amount of VAT compensations for 2015 is notably higher than in the

[84] According to Italian law, businesses can claim VAT credit compensation for one year until February of the following year.

previous years, so that this shift is considered structural. For 2016, Italian tax authorities estimate a further increase in overall VAT compensations (from EUR 12.3 million to EUR 12.7 billion), largely attributable to split payment[85].

Despite this large increase in compensations for VAT credits, and increased reimbursements, the net effect of split payment on the VAT Gap remains positive.

Impacts for public authorities

Public authorities implementing the split payment mechanism on their transactions have seen an improvement in their cash flow, as they can now benefit of the VAT amount they store temporarily before transferring it to the VAT bank account to the Italian Central Bank (or other credit institution).

Public authorities (especially the smaller ones, such as small municipalities) are negatively impacted by the increased administrative burden for implementing split payment. While the electronic invoicing system is automated, still public authorities have to download and check manually the invoices, and communicate with the suppliers in case of mistakes (e.g. wrong VAT rate, wrong identification code, wrong application of split payment, etc.). Invoices containing errors are rejected and suppliers have to resubmit them, therefore public authorities had to communicate to suppliers where the problems are and why the invoice has to be rejected, in order to smoothen the process. This control activity has been particularly important in the first months of implementation of split payment, where uncertainties on its exact application were higher.

In addition, each transaction leads to two payments, one to the suppliers for the taxable amount, the other to the ad-hoc VAT bank account. This leads to increased financial transaction costs, which are directly proportional to the number of invoices received and processed.

For instance, a medium-sized municipality (of about 40 000 inhabitants) receives and processes about 12 000 invoices per year. Processing such invoices required 2-5 minutes each, while the remaining obligations (e.g. downloading invoices from the SDI, monthly communication of invoices, additional checks, filing of monthly payment to the ad-hoc VAT bank account, etc.) required more than half of an FTE[86].

Impacts for suppliers of public authorities

The introduction of the split payment system was heavily criticised by business organisations in Italian media for its expected negative impacts on businesses' cash flows, and especially on SMEs. Business organisations argued that such a measure is not justified by the fight against tax fraud, as it applies to transactions already subject to electronic invoicing (in case the

[85] Interview with Italian tax authorities.
[86] Interviews carried out during fieldwork

customer is a public administration). While e-invoicing does not prevent fraud *per se*, it improves notably the amount and timeliness of information available to tax authorities, making the monitoring and the fight against evasion easier. Such remarks were expressed by business organisations in the months immediately preceding and immediately following the introduction of the split payment mechanism by the Italian Tax Authority[87].

Data show that some industries have been particularly affected by the introduction of split payments, namely[88]:

- Construction;
- Pharmaceutical (suppliers to public authorities in the health sector);
- Real estate (management of buildings, cleaning services, etc.)
- Catering services (suppliers to schools, hospitals, etc.)

Prior to the introduction, business organisations estimated the costs for businesses from such provisions at EUR 230 million in 2015[89], of which EUR 155 million of financing cost due to the fact that businesses are in a refund position more often and in general tax authorities only refund outstanding balances six months after the request. An additional financing cost was identified for an amount of EUR 55 million due to the fact that businesses cannot dispose of the VAT amount in between the moment of the payment from the customer and the moment VAT is to be paid with the submission of the VAT return. A last cost was estimated at EUR 21 million because of increased administrative compliance costs related to the VAT reimbursement[90].

While there are no consolidated figures on the cash-flow impacts on split payment on businesses, available data from 2015 and 2016 show that businesses supplying public authorities have overall experienced a worsening of their cash flow. The overall level of such impact depends on several factors, such as the size of the business, the industry, and the share of turnover (and VAT) represented by supplies to public authorities.

To reduce the negative financial effect, the suppliers of subjects falling under the split payment rules, are entitled to file VAT refund claims on a quarterly basis, and they have priority in receiving repayments (only under condition that the VAT refund is claimed due to the fact that the output VAT is structurally lower than input VAT).

On average, businesses receive reimbursements for their VAT credits in three to six months. Businesses with transactions subject to split payment are entitled to faster refunds (for the share of VAT subject to split payment), which however does not compensate entirely the worsening of their cash flow position.

[87] See for instance: http://www.confindustriact.it/upload/file/dicono%20di%20noi/2015/20151028sudpress.pdf , http://cuneo.confartigianato.it/petizione-contro-lo-split-payment/, http://www.cna.it/notizie/le-azioni-cna#.WLlNJ40zWUk

[88] Confartigianato, Nota informative N. 38/2016

[89] See: http://www.confartigianato.it/2015/06/la-scure-di-bruxelles-su-reverse-charge-e-split-payment/

[90] See: http://www.lapam.eu/lapam?action=content_read&id=387

As mentioned earlier, a notable increase in compensation of VAT credits was registered, both ‘vertical’ and ‘horizontal’. Using VAT compensations (and especially ‘horizontal’ compensations) allows businesses to reduce their cash outflows (either annual or infra-annual), as they do not have to pay additional VAT or other taxes due in that period. Therefore, many businesses (especially SMEs) tend to favour such mechanism, despite the related costs (e.g. the prior notification and/or the compliance certificate, see Table 3).

Larger businesses however only have a limited use of compensation mechanisms, as awards of compensation have a ceiling[91] (even combining all provisions), and large companies often have higher VAT credits.

Therefore, in order to counter-balance the negative effect of split payment on cash-flow, SMEs tend to use compensations and reimbursement first, then own capital and reserves, and to use bank financing and loans as a last option.

Larger companies tend to use bank credits more often. Large businesses can indeed have better financing conditions than SMEs, and benefit from more additional instruments SMEs find harder to access. For instance, interviews have shown that banks can advance up to 85% of VAT credit with an annual interest rate of 4%, which is lower than the rates usually applied to bank over-drowns.

4.4.4 Recent redevelopments

As mentioned earlier, the prorogation of the derogation and its expansion to companies controlled by central and local public authorities and to a list of approximately 40 companies listed to the stock exchange[92] is in force from 1 July 2017 to 30 June 2020. Based upon this extension, Law Decree n° 148/2017 provides that, starting from 1 January 2018, the split-payment regime will be extended to supplies of goods and services rendered to additional categories of public bodies (such as public economic bodies, special companies, foundations, etc.) and their subsidiaries.

It is too early to have real data on its effects both on the reduction of the VAT gap and on the administrative costs and cash-flow of suppliers of goods and services to public authorities. Ex-ante estimates carried out by the Italian Tax Agency and Ministry of Economics and Finance estimate that these provisions are going to affect approximately additional 3 500 public authorities and 150 000 additional suppliers, with about EUR 1.4 billion of recovered VAT per year.

[91] Overall, businesses can request horizontal compensation (including all types of taxes and contributions) up to EUR 700 000 per year.

[92] COM(2017) 169 final, Proposal for a Council Decisions authorising the Italian Republic to apply a special measure derogating from Articles 206 and 226 of the Directive 2006/112/EC on the common system of value added tax.

4.5 Developments in EU Member States

4.5.1 Voluntary split payment in EU Member States

Based on information gathered during the desk research and fieldwork, some Member States, such as the Czech Republic and Estonia, apply in practice a form of split payment on voluntary basis by allowing business customers to split the VAT amount and pay it over directly to the tax authorities on behalf of the supplier. This option can for example be used in situations where the customer is concerned about a joint and several liability and deals with a new or less trustworthy supplier. It requires however a VAT system which enables VAT payments on behalf of other taxable persons.

Regarding the EU VAT legislative framework, such voluntary regime would not seem to require an application for a derogation from the current EU VAT Directive, provided the regime does not defer from the VAT obligations as regulated in the EU VAT Directive. The VAT Directive provides a sufficient level of flexibility for voluntary arrangements around VAT payments, regulating mainly the obligation of the Member State to ensure that the VAT is paid and any double or non-taxation is avoided.

In general, such voluntary regime ought to adhere to the following principles:

- The general liability for VAT will be on the supplier according to Article 193 of the VAT Directive, except in case of specific transactions covered in Articles 194 to 205;
- The joint and several liability provisions, if any, comply with Article 205 and Article 207(2) of the VAT Directive;
- The Member States have developed clear rules for payment, accounting and declaration of VAT in situations where VAT is paid on behalf of the supplier by the customer (or a third person), avoiding the risk of double taxation.

Recently, split payment has been increasingly discussed and considered by governments as an alternative VAT collection method within the EU and beyond. For example, the recent fourth OECD Global Forum on VAT, which took place in April 2017 in Paris and was attended by over 100 governments across the world, had included this topic (experiences with VAT/GST withholding regimes and possible models and experiences with split payment) in the agenda due to high interest by world governments[93].

Within the EU, Poland, the UK and Romania have expressed interest in a split payment system.

4.5.2 Poland

The Polish government is considering an introduction of a voluntary split payment regime, planned to come into force from April 2018. The relevant draft legislative proposal for the

[93] See: http://www.oecd.org/tax/consumption/vat-global-forum.htm

amendments in VAT Act was consulted by the government during summer 2017 and is now going through the Governmental approval process[94].

Under the draft proposal, split payment would be applicable only to business to business transactions, where payment is carried out by bank transfer. A taxable person receiving an invoice stating a VAT amount would have an option to pay the VAT amount into a blocked VAT bank account of the supplier (VAT would be actually split by the bank, rather than the business making two separate payments). Banks will open the blocked VAT bank accounts for all businesses automatically. If the purchaser opts for split payment, he will enjoy benefits, such as relief from joint and several liability, where applicable; entitlement for VAT refunds within 25 days from filing the VAT return and reduction of the VAT amount payable (based on a statutory formula) if a payment is made from a blocked VAT account before the statutory deadline.

As the choice to apply split payment will be made by the customer, who will be motivated to do so, the suppliers will find themselves in a situation where they would not have any other option commercially than to accept that the VAT is paid to their blocked VAT bank account. .

The blocked VAT bank account could be used for:

- VAT settlements with the tax authority (both output VAT payments and input VAT refunds); and
- Input VAT payments to the supplier's VAT bank account.

Therefore, like in Bulgaria and Azerbaijan, the blocked VAT accounts could be used for transactional input VAT payments, reducing the cash flow impact of the split payment. In limited cases, and based on approval of specific written request, the funds on VAT account may be used for other purposes (e.g. to settle the balances of other taxes).

The taxable person who has joined the scheme (needs to hold a Polish bank account), is able to make just one payment for their purchase, whilst the VAT amount will be split by banks and transferred to the VAT account of the supplier.

To enable banks to split the VAT, the taxable person splitting the VAT needs to submit to the bank also transactional information (invoice number, supplier's VAT number, value of supply and the amount of VAT) at the time of the payment.

Although not currently included in the draft proposal, some additional reporting to the tax authority may be added later, to enable better compliance control.

4.5.3 The UK

The UK government published a call of evidence on 20 March 2017[95] and calls for stakeholder input on an alternative method of collecting VAT for online business to consumer sales,

[94] See: https://legislacja.rcl.gov.pl/projekt/12298259/katalog/12432717#12432717
[95] See: https://www.gov.uk/government/consultations/vat-tackling-fraud-on-goods-sold-online-update-on-split-payment

seeking evidence on the technical and technological feasibility for a split payment mechanism driven by payment technology, where VAT would be split at a point in the payment cycle.

According to the related 2017 spring budget[96] '... *This is the next step in tackling the non-payment of VAT by some overseas traders selling goods online to UK consumers*." The consultation document confirms the focus on non-compliance relating to shopping via online marketplaces, where the government has identified significant VAT losses, ranging £1-1.5 billion (EUR 1.4 – 2.1 billion) of VAT in 2015.

The document notes that the government *'... wants to ensure that VAT collection mechanisms reflect the evolving retail environment. VAT collection has not changed significantly since it was introduced in 1973. There have been significant technological advances in the payment industry, which may facilitate different approaches to VAT collection and help reduce fraud. HMRC is therefore exploring alternative solutions for collecting VAT in real time through payment technology*.'

This information seems to indicate an interest in a more targeted split payment model, applying to online B2C sales by non-UK traders to UK customers.

4.5.4 Romania

The Romanian government approved on 30 August 2017 the proposal for introducing a VAT split payment mechanism[97]. The new mechanism has been introduced as an optional measure from 1 October 2017 (with incentives), becoming mandatory from 1 January 2018.

The Romanian split payment mechanism is also based on blocked VAT accounts. Separate VAT accounts will be opened by default by tax authority at the office where taxpayers are registered (perhaps similarly to the Azerbaijan model). However, the businesses have an option to open a separate bank account at a commercial bank (similarly to the Polish and Bulgarian model), provided the bank has technical capabilities for setting up such accounts (with specific VAT IBAN number).

Split payment would be made by business customer, transferring the VAT directly to the VAT account of the supplier. This does not apply to the payments in cash, cards or cash substitutes, but supplier has to transfer the respective VAT amount to the VAT account in seven working days.

The VAT account can be used only for output and input VAT payments. Transfer to other bank accounts requires prior approval of the tax office (to be received within three days from the request). Cash withdrawals from VAT account are prohibited. From January 2018 the banks need to be able to verify the correct use of VAT accounts.

Both supplier and customer are liable to use VAT accounts and split the VAT. Failure to comply will result in penalties.

[96] See: https://www.gov.uk/government/publications/spring-budget-2017-documents/spring-budget-2017.
[97] Ordinance no 23 of 30 August 2017, published in the Official Journal of Romania (no 706)

5 Considerations for the design of policy options for split payment

This section reports the considerations that guided the design of the split payment options with regard to the general legislative context and specific design elements.

5.1 Considerations regarding the general legislative context

In order to understand how split payment as a concept would fit into the EU VAT regime and wider legislative context, it is important to analyse how it would impact the current EU VAT legislative regime, interact with ongoing VAT legislative developments and with financial regulations, such as SEPA legislation.

This section provides an overview of the analysis carried out. The full details are provided in Annex A.

5.1.1 Current EU VAT regime

As the move to a split payment model will change the roles and obligations of taxable persons (both suppliers and, potentially, customers) and potentially also tax authorities, it is unavoidable that changes will need to be made to the EU VAT Directive to provide the necessary legislative framework.

The main changes (derogating provisions) would be needed regarding the following parts of the VAT Directive (presented following the structure of the Directive and considering the design of policy options included in this study):

- **Title X - Deductions** (Articles 167-192)
    - **Chapter 1** Origin and scope of right of deduction
        - right of deduction of VAT paid under split payment mechanism (optional)
        - Member States could be allowed to regulate that the right of deduction of VAT on supplies covered by split payment regime is postponed until the VAT has been paid to tax authority in order to ensure the compliance of the business liable for VAT payment under split payment regime (usually business customer).
    - **Chapter 4** Rules governing exercise of the right of deduction, Article 178
      To add that as condition for the deduction of VAT regarding split payments, the taxable person must complete the formalities as laid down by each Member State.

- **Title XI - 'Obligations of Taxable Persons and Certain Non-taxable Persons'**
  - **Chapter 1** Obligation to pay, Section 1 Persons liable for payment of VAT to the tax authorities (Articles 192a-205)
    - VAT payment liability of the customer (the main change)
      To regulate the VAT payment obligation and liability relating to split payment
  - **Chapter 1** Section 2 Payment arrangements (Articles 206-212)
    - Obligation to pay VAT at the time of payment for the supply, (specifying transactions where applied, such as B2B)
    - Obligation to pay VAT at the time of submission of VAT return on purchases, subject to split payment, that were made during the taxation period but not paid for. (safeguarding measure)
    - Obligation to pay VAT daily (e.g. on B2C or cash transactions)
  - **Chapter 3** Invoicing, Section 4 Content of invoices (Article 226)
    - Obligation to add the mention of 'split payment' on the invoice,
      Applies as a marker that VAT amount should not be paid to/collected by the supplier
  - **Chapter 5** - Returns (Article 251)
    - To add obligation to declare separately supplies and purchases subject to split payment and the respective amounts of VAT.
      Attention also needs to be paid to the purchases where VAT has been already paid at the time of submission of previous VAT return.
  - **New Chapter 7a (or 6a)** – Transactional statements
    - To add obligation for taxable persons to submit monthly sales/purchases statements on supplies and purchases subject to split payment (i.e. covering B2B and B2G, but not B2C), where VAT payment obligation has arisen within the declaration period (i.e. where customer has paid for the supply). Statement should contain for every transaction the invoice date and number, VAT identification number of the supplier/purchaser, taxable amount and payable VAT amount.

Instead of changes to these provisions or sections, it seems however more appropriate to introduce split payment as a **new special scheme under Title XII Special Schemes**, containing all required provisions that derogate from the common provisions, as well as all necessary new definitions. This is more suitable approach especially if the split payment mechanism is introduced as optional for the Member States, as suggested in the policy options below.

In addition to the above, some other legislative changes could be required or considered, if the chosen final design of the split payment mechanism differs from the policy options as suggested below, such as a potential change in Chargeable Event and 'Chargeability of VAT' (Articles 62 – 92) that has been considered unnecessary in below policy options, or introduction of e-invoicing that has not been considered essential in policy options, but could be added.

Analysis of legislative changes relevant to specific policy options have been included also in below descriptions of the policy options.

5.1.2 Derogation to the current regime: generalised reverse charge mechanism (GRCM)

Considering the Commission proposal to enable some Member States to apply for the introduction of a Generalised Reverse Charge Mechanism (GRCM) at a national level to tackle VAT fraud, it is important to analyse the potential interaction of a split payment mechanism and GRCM at the Member State level, as well as between the Member States applying different regimes[98].

At the domestic level, the measures would apply generally to the same supplies (mainly B2B) applying a similar underlying principle that the VAT on transactions is not collected by the supplier. The main difference between the two regimes comes from the VAT payment time and method: in case of GRCM the business customer is required to account for VAT on his periodic VAT return (applying reverse charge method), whilst in case of split payment the customer would need to pay VAT on transactional basis to the tax authority.

Due to the overlap of the two measures, the regimes are therefore by nature mutually exclusive as far as the supplies are covered by both measures.

However, should the scopes of two measures differ, e.g. if supplies below EUR 10 000 threshold would not be covered by the GRCM, it would be theoretically possible to combine the two measures and apply split payment to B2B supplies not covered by the GRCM. In this case, the obligations of the supplier and the customer would differ depending on the value of the transaction. Regarding B2C supplies, the GRCM could not be applied by nature, but a version of split payment on the supplier side (as suggested below for Option 3) could be possible.

Such combination of different anti-fraud measures would make the VAT regime significantly more complex and increase administrative burdens for both businesses and tax administrations. However, such combination could be considered more appropriate, if the VAT fraud risks are expected to be significant regarding the transactions with lower value that potentially cannot be covered by GRCM (below GRCM transactional threshold).

Regarding cross-border supplies, as far as neither mechanism applies to cross-border transactions (which remain generally subject to reverse charge or similar intra-EU acquisition in the current VAT regime), there should generally be no impact on Member States applying different mechanisms, considering the VAT obligations or their consequences.

[98] Commission proposal COM(2016)811 Amending the VAT Directive to include the temporary application of a generalised reverse charge mechanism in relation to supplies of goods and services above a certain threshold, https://ec.europa.eu/taxation_customs/sites/taxation/files/com_2016_811_en.pdf consulted 13 September 2017.

5.1.3 Future regime: definitive VAT system

Given the intention to move towards a definitive VAT system[99], it is important to examine the functioning of a split payment mechanism under a definitive regime based on the general principle of taxation at destination.

Although it seems technically possible to apply split payment in a definitive VAT regime, as further analysed below in policy options 5-7, it is recognised that charging and collecting VAT by the supplier (opposite to the split payment concept) is an important element of the definitive VAT regime and is seen as a significant anti-fraud measure. Therefore, it is relevant to assess the comparative and combined effects of the definitive regime and split payment on the reduction of VAT fraud.

The main objective of both measures would be to tackle the VAT fraud, more specifically the MTIC fraud and its more aggressive carousel fraud models, as described in section 3.2.2).

With the introduction of the definitive regime, intra-EU transactions would become taxed. As the MTIC fraud is largely based on the abuse of intra-EU exemption (followed by VAT charged on forward domestic supply, resulting in a potential gain in full amount of VAT), a significant decrease of MTIC fraud is expected. The Commission study on the 'destination principle' expects that the definitive regime may reduce MTIC fraud by 83%[100].

The definitive regime includes the Certified Taxable Person (CTP) concept allowing the application of reverse charge on intra-EU supplies to CTP (instead of taxation). However as a CTP would have to be certified by the tax authority (as a compliant and trustworthy business), the risk of MTIC fraud carried out by CTPs is expected to be low. Still, it will depend on the effectiveness of the criteria and the process of achieving the CTP-status.

Although a significant decrease of MTIC fraud is expected from the introduction of the definitive regime, it is likely that MTIC fraud would still continue to exist. The main reason for this is that the supplier would still charge and collect the VAT and by 'going missing' could gain the VAT on the margin applied.

Application of split payment would remove this supplier side missing trader risk as no VAT would be collected by the supplier on all B2B supplies (both intra-EU and domestic). However, this fraud could partly shift to the customer side (the customer, liable to split VAT would 'go missing' without paying it over to tax authority). The extent of such fraud depends on the compliance control measures over transactional VAT payments and additional reporting.

As split payment would apply also to purely domestic supplies, unlike the definitive regime, and tackle thus regular missing trader fraud, it is likely that implementation of split payment regarding domestic supplies would reduce VAT fraud in both the current as well as the definitive VAT regime.

---

99 Commission communication on the Follow up to the Action Plan on VAT – Towards a single EU VAT area – Time to act COM/2017/566 final, Brussels, 4 October 2017, p. 6.

100 EY study commissioned by the European Commission, Implementing the 'destination principle' to intra-EU B2B Supplies of Goods, TAXUD/2013/DE/319, 30 June 2015, pp. 17

A question arises however - whether in a definitive regime, split payment should be applied to the supplies impacted by the introduction of the definitive regime, i.e. the intra-EU B2B supplies to non-CTP businesses?

It is difficult to assess whether the combination of applying VAT on intra-EU supplies (paid via the one stop shop mechanism) followed by split payment on domestic supplies would provide a different level of reduction of VAT fraud than application of split payment across both intra-EU and domestic supplies. It is clear that considering the complexity of the VAT system and administrative burden of both businesses and tax administrations, the application of one regime throughout the supply chain (i.e. applying split payment) seems simpler and less burdensome.

More detailed analysis and impact assessment has been carried out in the study on the combined application of the definitive regime and split payment (see policy options 5-7). Importantly, it focuses only on the split payment impact and does not take into account the implementation and compliance cost of the definitive regime itself.

5.1.4 Single Euro Payment Area (SEPA) legislation

As financial transfers, potentially including also cross-border transfers, are the key element of any split payment option, it is essential to assess the compatibility of the split payment options with the SEPA regulations. Any potential legal or technological limitations for banks or other payment processors and payment service providers from SEPA regulations would need to be taken into account in designing the policy options for split payment, to avoid imposing obligations on financial institutions, which they cannot uphold in the light of the regulatory framework.

A high level analysis has been therefore carried out on the most relevant legislative act, the Second Payment Services Directive (PSD2)[101], which regulates the rights and obligations of banks and other payment service providers regarding financial transfers carried out on behalf of the users and will be implemented by all Member States by 13 January 2018.

The PSD2 aims to modernise the legal framework for payment services and introduces certain new payment services and their providers, such as ‘payment initiation service’ (PIS) and ‘account information service’ (AIS), which are both relevant for the split payment concept, as they enable more elaborate and flexible payment processes.

However, as consumer protection is at the heart of the PSD2, it clarifies and strengthens also the consumer rights. For example, based on the Article 64 of the PSD2, no payment transactions can be carried out by the payment service provider without explicit consent of the payer, who can withdraw the consent at any time. Similar limitations apply also to the new PIS and AIS services (see Articles 66 and 67 respectively).

This implies that the payer/account user (e.g. business customer) needs to give precise instructions on how and where to transfer the money and on which amount, thus initiating

[101] Council and European Parliament Directive 2015(2366) on payment services in the internal market

every payment. Should this mean, as we interpret it, that in case of a split payment, the user needs to tell precisely which amount (of VAT or payment for supply) to pay to which account, this indicates that the user has the responsibility for giving instructions for two payments instead of one.

Even by a more flexible interpretation that the user may provide prior more general consent for splitting of the VAT amount on certain payments (relating to taxable supplies), this consent would still be controlled by the business user and thus not be suitable as an element in a mandatory split payment regime, where VAT is split within the payment process (i.e. obliging a business to provide 'consent' to banks to carry out VAT splitting would seem to go against the principles of PSD2).

The payment could thus not be split into two payments by the decision of a bank after leaving the user's bank account (e.g. by the merchant acquirer or supplier's bank when received as one payment from the customer's bank). If payment providers cannot make such decision, they cannot also bear responsibility for the outcome and have a liability to split the VAT.

Consequently, if the VAT splitting liability cannot be put to a bank or any other payment service provider, the split payment model would need to be designed without allocating them a specific role or responsibility (e.g. to become a splitting agent). Although, an optional role as for example a contracted intermediary acting on behalf of the customer, could still be possible.

Interviews with representatives of DG FISMA and financial institutions confirmed the above analysis. Some financial institutions noted that although the legislation is not fully clear (it may become clearer when the Directive is fully implemented at national level), the payment service providers, especially financial institutions, are likely to take a more conservative approach in order not to risk breaching the consumer protection rules.

In addition to the regulatory complications, the financial sector indicated that a split payment model is only feasible when information on the VAT amount is provided by the supplier or customer himself. Similar feedback was provided by financial institutions also during the public consultations on the Green Paper[102]. However the main issue several banks then identified was the assessment of their own capacities to handle a doubling of payment instructions and the way to capture the extra information provided by the parties on the VAT amount. Technological developments may have reduced such data handling concerns, but gathering the underlying information and linking it to the payments was still considered by banks interviewed for the study as the main technical obstacle to the role of financial institutions as the potential splitting agents.

[102] European Commission, Summary report of the outcome of the public Consultation on the Green paper On the future of VAT Towards a simpler, more robust and efficient VAT system, 2011. Available: http://ec.europa.eu/taxation_customs/resources/documents/common/consultations/tax/future_vat/summary_vat_greenpaper.pdf p. 59

5.1.5 Key considerations on the general legislative context

Based on the above analysis the following conclusions can be drawn regarding the considerations on the general legislative context:

- Regarding the required legislative changes to the EU VAT Directive, it seems most appropriate to introduce **split payment as a new special scheme under Title XII Special Schemes** containing all required provisions that derogate from the common provisions (person liable for VAT; payment arrangements; invoice reference; additional information on VAT return and new transactional statements), as well as all necessary new definitions (split payment, EFT payment method, B2B/B2G/B2C transaction etc.). This is a more suitable approach especially if a split payment mechanism would be introduced as optional for the Member States, as suggested in the policy options below.
- The GRCM and split payment were found to be **mutually exclusive** measures, if they would cover the same supplies. Indeed, under GRCM, the VAT amount would not be payable towards the tax authorities to the extent it is deductible. Should the scope of measures differ, it would be technically possible to combine them. However the complexity of such combination and the resulting increase in administrative burden may make such combined regime unsuitable and disproportionate as an anti-fraud measure.
- Regarding the application of split payment in a **definitive VAT regime**, split payment could be applied to **domestic transactions** in the same way as in the current VAT regime. However, regarding the VAT treatment of intra-EU cross-border supplies, the changes currently proposed as key part of the definitive regime (VAT collected by the supplier) and split payment (VAT paid directly by the customer) would be conflicting, although having the same objective to tackle VAT fraud (especially MTIC fraud). A single regime throughout the supply chain (i.e. applying split payment) would seem simpler and less burdensome than a combination of the two.
- Introducing split payment under the current **SEPA** regulations would be **challenging if not impossible under** the PSD2. To put a legal obligation on banks or other payment service providers to carry out VAT split payment would require an explicit consent of the business to initiate any payments. In addition, the collection and linking of underlying information on the supply to the payments is considered technically highly challenging. In the EU countries currently applying or planning to apply split payment, this problem is tackled by either requesting customers to split the VAT or using blocked VAT bank accounts. An efficient and broad EU level application of split payment may however require it to be integrated into the standard payment flow.

5.2 Considerations for policy option design

Before designing the policy options, a wide range of possible split payment models were analysed in terms of their technical and technological feasibility[103].

The models include several options for splitting agents, different types of payment, as well as models with a blocked VAT bank account. These technical designs were assessed for transactions in a B2B context and then in a B2C or B2G context and in different VAT regimes: the current VAT regime, the derogatory GRCM regime and the definitive VAT regime.

The analysis on possible split payment models and preliminary policy options was tested at the two business stakeholder workshops, interviews with EU level stakeholders, as well discussions between study team experts and the Commission.

This analysis of a wide range of split payment models resulted in a list of preliminary findings which were used as a basis for designing the policy options. Most importantly, a number of design elements or models were excluded from the policy options, as the preliminary analysis found these largely unfeasible. The main findings are described below.

5.2.1 Supplier as a splitting agent

Although technically possible (by adopting additional obligations), it has been considered that the **supplier is generally not a suitable splitting agent**. It would be too similar to the current VAT system and therefore not provide a viable solution to VAT fraud concerns. However, it **may be the only option in B2C transactions or on cash payments**, if considered necessary to include these supplies in split payment in order to avoid fraud shifting.

5.2.2 VAT payment liability

A question clearly linked with the definition of a split payment is the division of VAT related liabilities, especially which person involved in the transactions is liable for the VAT payment to the tax authority. Regarding the other VAT related liabilities, such as calculation of VAT, invoicing, reporting and record keeping, these would stay with the supplier (except regular VAT accounting obligations as a customer), as the supplier is still best placed for this and split payment targets specifically the VAT payment.

One key element to consider is that the person liable for VAT, should have access to information that will allow him to verify that VAT has been paid. If the supplier is liable himself, then he will be able to ensure payment, as he will account for it himself. However if the supplier is liable but a split payment mechanism obliges the customer to pay the VAT, the supplier would need to be able to verify that the funds have reached the tax authority's accounts properly. The last option is that the customer becomes liable for VAT when split payment is applied. Again the customer will be able to verify VAT is accounted for as they have made a payment towards the administration themselves.

[103] See Annex A for a full analysis of the split payment models, their design elements and related considerations.

In the models analysed, the VAT liability first lied with the supplier, as in the current VAT payment mechanism. However, when testing the analysis, it was found that **shifting the VAT payment liability to the customer** would be more appropriate, as the supplier cannot control whether the payment of VAT is made by the customer and it would not be therefore justified to retain liability for VAT payment with the supplier in case of a split payment.

5.2.3 Blocked VAT bank account

Blocked VAT bank accounts, where a supplier can use the VAT portion split paid by his customer to execute himself the split payments of the VAT portion on his purchases, were a feature of the split payment mechanism in the 2010 study[104] with the aim of reducing the cash flow impact of a split payment. Models were analysed to assess the feasibility of such design. It was found that:

- all VAT registered businesses would need to set up separate VAT bank accounts, in every Member State where they make or receive supplies subject to VAT, resulting in a very large number of additional bank accounts and potentially high additional costs of managing these accounts;
- the use of a blocked VAT bank account for input VAT payments means that several bank accounts (regular current accounts and VAT accounts) would need to be used by businesses for every taxable transaction, resulting in a complex combination of financial transfers and additional cost regarding transfer fees;
- the system requires detailed information sharing on the transaction details, such as the correct amount of VAT, as well as correct details of all relevant bank accounts;
- such complexity leads to a high probability of human error (unless designed to be fully automatic) and a need for a separate set of rules for corrections and compliance control;
- the complexity of the system and required compliance control may create new types of VAT fraud (e.g. new fraud scheme emerged in Bulgaria[105]);
- Full automation of such a system, which may be a way to handle the complexity and provide sufficient robustness, is likely to require very extensive and costly changes in current systems, which are likely to make the measure unsuitable for SMEs who would bear proportionally higher cost;
- Another way to reduce the complexity and risk of error would be to increase the role of banks, which could be able to automate the mixed use of current and VAT bank accounts. However, as analysed above, banks would require access to detailed information and the business would still need to initiate payments and/or give explicit consent.

Because of the complexity and potential cost the setup of a split payment regime with blocked VAT bank account requires, the **use of such blocked bank accounts may not be a feasible**

[104] PricewaterhouseCooper (2010), Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries,
[105] See Section 4.3.3 for details of the mechanism in Bulgaria.

solution for a split payment on a broad scale of transactions and affected parties. In addition, the Bulgarian experience of VAT fraud schemes based on split payment model with blocked VAT bank account may indicate its limited feasibility as an anti-fraud measure. Therefore other measures are likely to be preferable for the reduction of cash flow impacts.

However, as the blocked VAT bank account formed a key element in the split payment model suggested in the 2010 study, it was considered necessary to carry out further analysis on such a model and an alternative policy option was added for these purposes.

5.2.4 Partial split payment

Partial split payment can relate to two topics, namely the limitation of the split payment obligation to transactions above a certain threshold and the limitation of the split VAT amount to part of the VAT payable on the transaction.

A threshold on transaction value could be applied to reduce the cash flow impact and volume of transactions and payments. However, such a threshold would create a risk of artificially splitting transactions to avoid split payments and add complexity to the system by requiring two regimes to be used. Therefore, a **threshold beneath which no VAT should be split, has been deemed unsuitable** and was discarded from the policy option design.

Splitting a proportion of the VAT payable is another measure applied to reduce the negative cash flow impact. This approach would also increase the complexity of the mechanism and is likely to reduce the overall effectiveness of split payment as an anti-fraud measure (as part of VAT is paid to the supplier). The complexity could be reduced by application of a common split rate (e.g. 50% for all transactions). The balance, i.e. the VAT which is not split and paid directly to the supplier, could then be used to pay input VAT, although it would then require that this proportion is well measured in order for it to reach its objective. Further, from the fraud perspective, by receiving partial VAT payment, the tax authority would have information of the transaction (although it could also be argued that a transactional reporting obligation without split payment would deliver the same result).

Although many countries, especially in South America, split only a proportion of the VAT amount (e.g. 5% or 50%), it has been found more appropriate to **split the entire VAT amount.**

5.2.5 Cash accounting

In the split payment models analysed, the VAT is split and paid usually at the time of payment. The **chargeability rules do not necessarily need to be changed to cash basis**, especially if the liability for the VAT payment has been moved to the customer. Where the supplier is not liable for VAT payment, the chargeability should not impact him. On the customer side, their new liability would be similar to the current VAT liability of a supplier in the sense that if they have not paid for the supply by the time of VAT return submission, they would still need to pay the VAT amount on these purchases, to ensure timely VAT payment to the tax authorities.

A question arises whether a **cash accounting based system** would be necessary in order to support businesses in a split payment regime. According to our analysis it could have a more detrimental than positive impact. A cash based regime would not support or impact the supplier's cash flow. It would provide some support on the customer's cash flow and administrative obligations (including better manage the liability moment of the VAT payment), but it is doubtful if many customers would prefer it , considering the consequential need for a separate VAT accounting on cash basis and regular accounting reconciliations which would significantly increase the administrative burden of businesses. Therefore, such cash flow support could be provided through the existing optional cash accounting schemes for SMEs.

5.2.6 VAT refund mechanisms

It is important to foresee **adequate VAT refund mechanisms,** as a quick and efficient VAT refund process is another way to reduce the negative cash flow impact for businesses.

In addition, it is necessary to implement clear provisions which specify who will refund the VAT in case of corrections, e.g. in case the supplier credits the invoice to the client. It could be argued that if a customer has paid separately to the tax authority, the tax authority may have to refund the customer when notified by the supplier of the application of split payment.

5.2.7 Other aspects

As it was considered appropriate to move VAT payment liability to customer, whilst leaving supplier responsible for invoicing, it was considered necessary to include also **new reporting obligations** (transactional sales and purchase lists) considering B2B and B2G supplies subject to split payment, to enable tax authorities to carry out compliance controls and match received VAT payments with taxable supplies.

Several other technical aspects of the design were raised by business stakeholders as elements that will have to be taken into account. For instance, **harmonised rounding rules** will have to be implemented. **Payments made on behalf of another taxable person** as well as **advance payments**, will also have to be thought through. There is a need in both cases is to clearly define the liability and/or timing for VAT split payment as well as the consequences of split payment (e.g. right and timing of input VAT deduction).

5.2.8 Key considerations for designing the policy options

Based on the above analysis the following conclusions were drawn regarding the considerations for policy option design:

- The supplier is generally not a suitable splitting agent, although in certain cases it may be the only option, e.g. on B2C or cash payments;
- The VAT payment liability ought to be with the business (other than the supplier) who has the necessary information on the transaction and control over the payment, i.e. the customer who is also the splitting agent;

- Blocked VAT bank accounts would reduce negative cash flow impact, but are likely not to be feasible due to added complexity and cost. However, an alternative policy option was added, to carry out limited benchmarking analysis on the features of a split payment with blocked VAT bank account;
- Partial split payment by either a transactional threshold or splitting just a percentage of VAT would also reduce negative cash flow impact. However considering the added complexity and reduction of effectiveness as an anti-fraud measure, it was not considered sufficiently feasible;
- Despite some potentially positive impact on cash flow and management of VAT payment liability, cash based chargeability or cash accounting is not considered necessary (and may be even detrimental) as a built in design element of split payment, where the VAT liability has been moved to the customer. The existing optional cash accounting schemes seem more appropriate for providing support to the businesses who require it;
- Efficient VAT refund processes would support the effectiveness of a split payment regime by helping to reduce the negative cash flow impact;
- In addition, it was considered necessary to include new reporting obligations (transactional sales and purchase lists) considering B2B and B2G supplies subject to split payment, to enable tax authorities to carry out compliance controls and match received VAT payments with taxable supplies.

6 Policy options for split payment as an alternative VAT collection tool

This section describes the policy options designed for implementing a split payment mechanism as an alternative VAT collection tool both in the current and in the definitive VAT regime.

6.1 Overview of the policy options

Based on the policy context, the problem assessment and the considerations presented above, a range of policy options were designed. The options are divided into two groups, the first group is based on the **current VAT regime** and the second on the **definitive VAT regime**. Within each group of options, the policy options build on each other, so the earlier options provide a smaller change from the base line system (current or definitive regime) and the following options are expanding the extent of the change.

Table 5: List of policy options

Number	Option description
Option 0	Status quo (current VAT payment system and definitive VAT regime)
	Options based on current VAT regime
Option 1	Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)
Option 1(b)	Option 1 with blocked VAT bank account
Option 2	Option 1 combined with a generalised reverse charge mechanism in certain Member States
Option 3	Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)
Option 4	Option 3 with extension of split payment to credit card and cash payments
	Options based on Definitive VAT Regime
Option 5	Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)
Option 6	Option 5 with extension of split payment on EFT to B2C and B2G
Option 7	Option 6 with extension of split payment to credit card and cash payments

Source: Deloitte elaboration

The sections below describe each of the policy options and explains the rationale behind the design decision. A high level assessment of main comparative advantages and disadvantages of different policy options is also provided.

6.2 Option 0 – Baseline (Status Quo & Definitive Regime)

In accordance with the Commission's Better Regulation guidelines[106], the list of policy options starts with the option of the current system with no policy changes. As a set of policy options are based on the current system and another set are based on the system of the definitive regime, the baseline will consist of two different scenarios to reflect this.

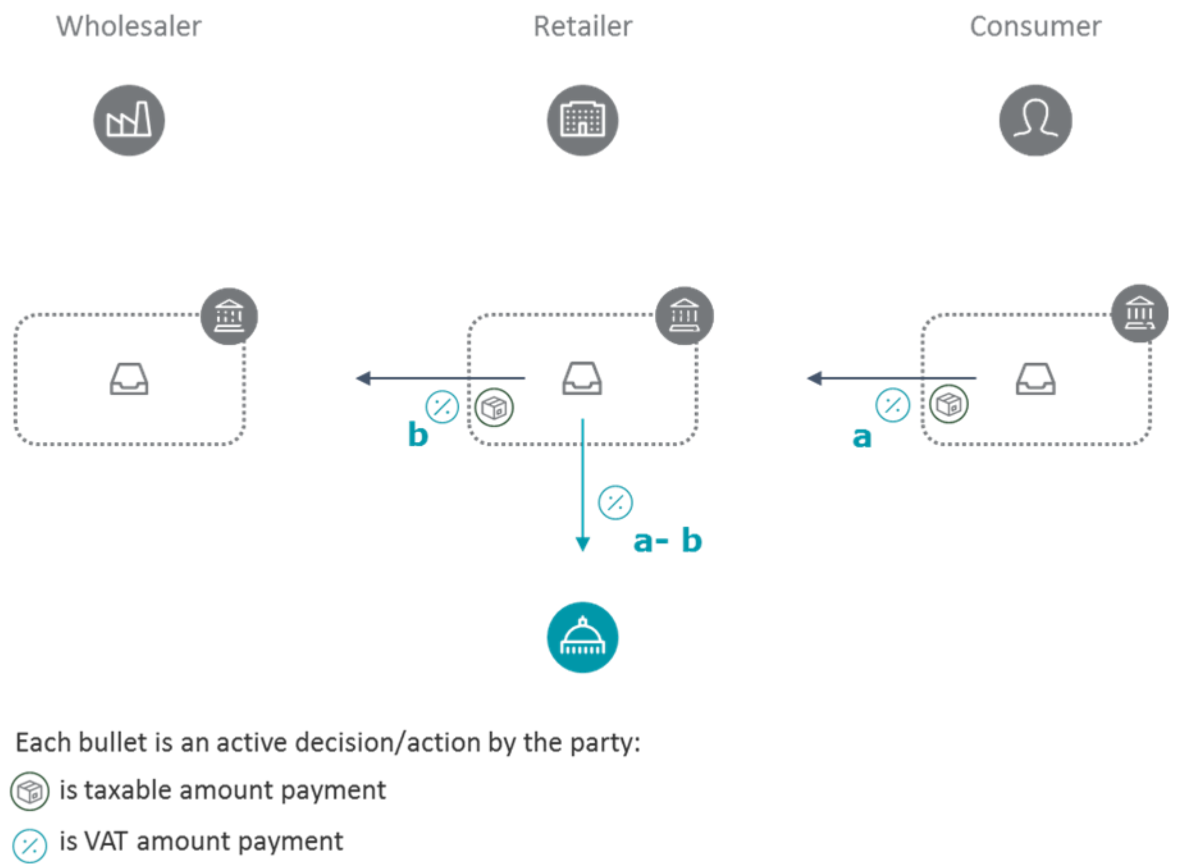
6.2.1 Status Quo Baseline

Under the current VAT regime (without any split payment mechanism), a customer pays the invoice amount VAT inclusive to the supplier. Retailers usually have both deductible input VAT they paid towards their own wholesalers or suppliers, as well as output VAT they receive from their customers (consumers).

The current VAT payment model is based on the principle of a taxable person (retailer) being able to balance his VAT payable (i.e. output VAT) and VAT receivable (i.e. input VAT) in the VAT return. The retailer only pays to the State the difference of the output VAT received and input VAT deducted. Alternatively, if the input VAT exceeds the output VAT, the retailer is entitled to a refund from the tax authority.

[106] Available: http://ec.europa.eu/smart-regulation/guidelines/toc_guide_en.htm

Figure 9: the current VAT model without split payment[107]



The methodology for establishing the baseline in the current system is outlined in Annex A. The baseline will therefore consist of figures on:

- The current VAT Gap;
- VAT revenues in the EU;
- The gross VAT revenues in the EU; and
- The number of businesses in the EU.

6.2.2 Definitive VAT Regime Baseline

Under the Definitive VAT Regime, the taxation rules according to which the supplier of goods collects VAT from its customer will be extended to cross-border transactions.[108] Intra-EU supplies would no longer be exempted, but would be taxed in the Member State of

[107] The overview of the current model is incomplete in the sense that it only presents the process for domestic supplies. Cross-border supplies of goods and services between taxable persons are derogations to this rule. These supplies (between the wholesaler and the retailer in the figure above) are zero-rated. Logically, a split payment model would not be applicable for these supplies, since there is no VAT to split under the current system.

[108] Commission communication on the Follow up to the Action Plan on VAT – Towards a single EU VAT area – Time to act COM/2017/566 final, Brussels, 4 October 2017, p. 6.

destination of the goods, unless supplied to certified taxable person (CTP)[109], in which case reverse charge would be applied. The liability to pay the VAT for local supplies of goods and services and for cross border supplies of goods to non-CTP's would thus lie on the supplier, who can use a one-stop-shop for the payment and declaration of VAT on supplies to non-certified taxable persons in other Member States. Thus the concept of intra-community acquisition would be abolished.

The methodology for establishing the baseline in the definitive regime, on top of the current regime baseline, is outlined in Annex A. The new baseline will therefore consist of:

- The share of the VAT Gap reduced by the definitive regime;
- The share of businesses impacted by the regime (businesses trading cross-border);
- Gross VAT revenues in the EU after implementation of the definitive VAT regime;
- The number of certified and non-certified taxable persons.

6.3 Options based on the current VAT regime

The first group of policy options is based on the existing EU VAT system, as laid down in the VAT Directive[110]. The following four options were retained:

	Options based on current VAT regime
Option 1	Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)
Option 1(b)	Option 1 with blocked VAT bank account
Option 2	Option 1 combined with a generalised reverse charge mechanism in certain Member States
Option 3	Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)
Option 4	Option 3 with extension of split payment to credit card and cash payments

For each policy option, the design encompasses the following elements:

- Scope of the option;
- Description and rationale;
- Roles and obligations of stakeholders, i.e. supplier, customer and tax authority;
- Impact on EU VAT legislation;
- Main advantages; and
- Main disadvantages.

[109] A certified taxable person is a compliant taxable person that has been certified as such for VAT purposes by the tax authority of the Member State of its establishment.
[110] VAT Directive 2006/112/EC

6.3.1 Option 1 - Current VAT regime with split payment applying to electronic financial transfers (EFT) between taxable persons (B2B)

Scope

The first policy option containing a change from the current system would apply a split payment mechanism to electronic fund transfers (EFT) between VAT registered taxable persons (B2B). Therefore, transactions other than B2B or where a different type of payment is used, are not included in this option.

Description and rationale

- **Splitting agent:** customer or contracted intermediary
- **Liability**: the customer is liable for VAT payment; the supplier is liable for invoicing with VAT and adding a mention on the invoice referring to the use of split payment
- **Other considerations:** no blocked VAT bank account; no threshold is applied; full amount of VAT split payable by the customer at the time of underlying payment
- **VAT declaration:** customer and supplier declare transactions within the scope of the split payment mechanism with other parties' VAT numbers and VAT amounts (transactional statement), together with their periodic VAT return
- **Cross-border supplies:** no split payment on cross-border supplies where intra-EU acquisition or reverse charge is applied
- **Optionality:** split payment mechanism would be optional for Member States, but mandatory for businesses
- **Chargeability**: VAT stays chargeable at the time of supply (as now, with separate VAT payment provision for customer)

The **customer** would have the **liability to split the VAT amount** on transactions where VAT is charged by the supplier[111]. However, the VAT would be split based on the VAT invoice received from the supplier, who is liable for the application of the correct VAT rate.

In this Option split payment is applied to **B2B transactions**. In order to keep the scope sufficiently wide to reduce the risk of avoidance and fraud shifts, the 'business customer' would cover **all taxable persons that are registered for VAT**. Therefore, it would include also all partially exempt taxable persons or public bodies registered for VAT, but exclude taxable persons that are not required to register for VAT (e.g. exempt small businesses, flat-rate farmers and fully exempt businesses). It was considered whether split payment could be applied also to non-VAT registered customers, i.e. to all taxable persons purchasing from VAT registered supplier[112]. However, as this option shifts VAT payment liability to the consumer, which needs to be accompanied with reporting obligations, the customer would need to be

[111] Therefore, for example exempt or zero-rated transactions (including export) and transactions subject to domestic or cross-border reverse charge would be excluded.
[112] The supplier would need to be VAT registered for split payment to apply, as non-VAT registered suppliers cannot charge VAT on their supplies.

VAT registered to enable the tax authority to carry out compliance control[113]. It is however recognised that excluding non-VAT registered businesses from split payment in this Option would enable part of the VAT fraud to shift to transactions with such businesses (falling under B2C transactions).

The customer can contract an **intermediary** to carry out his VAT obligations. An alternative would be an obligatory use of bank or payment processor as an intermediary. However, as explained in above, the SEPA regulations do not allow financial institutions to make any changes to financial transfers without direct instructions from the user of the account, therefore the business (in this case customer) would still be responsible for giving instructions for two separate payments and thus qualify as a 'splitting agent'.

A mandatory use of an intermediary not covered by SEPA regulations has been also considered, but was dismissed as a viable option. Although such businesses (e.g. so called 'fintech companies') already exist and would be capable to provide such services, obliging businesses to use such services is likely to create considerable market distortions.

An additional consideration in case of a mandatory use of an intermediary as a splitting agent would be also the additional cost of the intermediary. An optional (i.e. contracted) use of intermediary is therefore considered most appropriate.

As the **liability** for splitting the VAT lies with the customer, the supplier would not be liable any more for the effective payment of the VAT on these supplies. This switch of liability would be necessary, as supplier could not enforce and control the payment of VAT in such regime and it would therefore not be justifiable to keep them liable for this VAT. The supplier would still have liability for invoicing and declaration of VAT payable.

The split **full VAT amount** would be paid by the customer (or contracted intermediary) directly to the tax authority. The VAT paid by customer would be compared to the supplier's VAT return and transactional statement at the end of the tax period.

The other considerations on the design of the split payment model in this policy option are based on the analysis provided above. Accordingly, the use of a blocked VAT bank account was not retained as feasible and other measures are deemed better fit to mitigate cash flow impact. The option is also designed without a transactional threshold and with splitting of the full amount of VAT rather than a share (e.g. 50%) in order to keep the regime as simple as possible. However, it is recognised that such decision will increase the negative cash flow effect for businesses.

As the customer pays VAT for the supplier's taxable supplies, it is considered necessary to provide the tax authority with additional information to enable the tax authority to validate and control the VAT payments. Therefore, it is foreseen that the **supplier and customer communicate certain information to the tax authority with respect to the taxable transactions and respective VAT payments** within the scope, mentioning also the

[113] However, VAT registration does not exclude the possibility that the supplies of the customer are VAT exempt, e.g. under the SME exemption scheme.

supplier's/customer's VAT registration number and the VAT amounts paid. Such declaration could be made together with the periodic VAT return.

Limiting the scope to electronic financial transfers, but not including credit card payments online, would introduce an additional complexity, as suppliers would currently issue an invoice and leave the payment method flexible, but would need in this option to issue different types of invoice or not allow credit card payments.

Split payment is considered to be unnecessary on **intra-EU supplies** where the customer is the party liable to account for VAT, as no VAT payment to the supplier is made. However, in theory it would be possible to add such transactions to the system by foreseeing a specific payment of VAT by the customer to the tax authorities, if the objective is to collect VAT faster in all circumstances (or tackle customer-side fraud schemes, rather than just block VAT payments to suppliers. It would increase the negative cash flow impact (from the customer side), but would treat domestic and cross-border transactions more equally.

In a situation where an EU **business customer** who is **not VAT registered** in the relevant Member State would be required to make a split payment on a domestic transaction (i.e. supply taxable in the Member State where the supplier is established), they would need to have the same obligations as locally VAT registered businesses. However, an increased cost from additional VAT registration, declaration and payment cost should be taken into account.

As a split payment would not be applied to cross-border supplies, it could be introduced as an **optional regime for Member States**, which could then carry out their own impact assessment and fraud analysis to decide on the appropriateness of the measure for their national purposes. Although it is likely to increase administrative burdens of internationally trading businesses (which can be reduced by standardised design across the Member States), it may be still considered appropriate to keep regime optional considering the higher share of domestically trading businesses and negative cash flow effect for businesses. An optional approach would also enable to pilot the regime before its wider application across the EU. In any case, the regime needs to be **mandatory for businesses** as it would not otherwise fully deliver the desired objectives.

Regarding **chargeability**, based on the analysis above, it was not considered necessary to change the chargeability rules for this policy option, as it would generally not provide the expected level of support to businesses. Businesses who would benefit from it (mainly the smallest businesses), can use optional cash accounting schemes, which are available in the majority of Member States.

Regarding the application of split payment to **direct debits**, it seems necessary to keep the VAT payments separate from the payment collected by the supplier using direct debit. Therefore, the supplier would still be required to inform the customer (by issuing the invoice) on the VAT amount payable on the supply and the customer would need to make the VAT payment based on the invoice. The VAT payment to the tax authority could be either made by the same time when the main payment is collected by direct debit (to provide equal treatment with regular B2B transfers) or as a summarised payment at the time of the VAT return, based on the purchase listing (simpler but may influence business practices due to difference from other B2B transfers).

Regarding the application of split payment to **corrections** of transactions and credits/refunds, to avoid additional complexity, it could be foreseen that any VAT payment corrections (e.g. based on credit notes) are carried out on the periodic VAT return of the supplier and customer, whereby the customer would reclaim the VAT initially paid as a credit on his VAT return. However, this may not be appropriate in case of a simple human error, such as an incorrect bank transfer, where currently existing rights to cancel payments (even when made to tax authority) ought to remain in place.

Regarding the application of a split payment to transactions where the business **customer is a non-EU business** not VAT registered in the EU, should a supply be taxable in the Member State where the supplier is located, it would be most appropriate to exclude such supplies from split payment, so that the supplier would continue to charge and pay VAT. The main reason for this exclusion is to ensure best possible compliance control for tax authorities: in this situation it is significantly easier to collect VAT from the locally established supplier than from a non-EU business not VAT registered in the EU. Although it would be technically possible to require such businesses to register for VAT locally and apply split payment, it does not seem appropriate or proportional and may have overall negative impact on VAT fraud and non-compliance.

In addition to a pure VAT payment mechanism, adjustments could be considered to invoicing (e-invoicing), declarations (near real time[114]) and storage (SAF-T) requirements, to increase the effectiveness of a split payment mechanism. However, additional analysis would then be needed on the compound impact on the implementation and application cost and administrative burden. As an example, inclusion of e-invoicing with real time reporting or access by the tax authority would enable tax authorities either to automatically process the invoice data and notice any risks faster or to carry out spot checks as and when required. However, it is likely that such obligation would create significant additional administrative burden on businesses, especially SMEs. Regarding inclusion of standard audit files for tax (SAF-T), it would enable more efficient auditing of businesses by tax authorities. This would not be directly linked to the split payment but could be considered as a supporting measure. Such measure as SAF-T would require system changes by businesses and be more beneficial if the format is aligned at the EU level, enabling more off the shelf software products which would reduce the cost especially for smaller businesses.

[114] As an example, Spanish new VAT management regime on Immediate Supply of Information (SII - Suministro Inmediato de Información), to be implemented from July 2017, requires taxpayers to upload information of their VAT transactions within 4 days of the time of supply, http://www.agenciatributaria.es/AEAT.internet/en_gb/Inicio/RSS/Todas_las_Novedades/Novedades_en_Impuestos/Nuevo_sistema_de_gestion_del_IVA_basado_en_el_Suministro_Inmediato_de_Informacion.shtml , consulted on 12 December 2016

Roles and obligations of stakeholders

Supplier

The supplier is mainly liable for calculating VAT and **issuing a VAT invoice,** which would include VAT payable on the supply and a reference to the split payment. So the supplier would be liable for applying the correct VAT rate and calculation of the VAT due. This obligation would be similar to the current invoicing obligation. IT systems would need to be slightly adjusted to enable issuing such invoices. The current policy option design does not include a requirement that the invoice needs to be issued as an e-invoice and submitted to tax authorities when issued. Such additional requirement would increase the administrative burden of the supplier.

In the option where split payment is limited to EFT, additional complexity would be added by the need to separate B2B supplies, where customer would pay with credit card (or cheque) or to disallow payments with credit cards.

Adjustments would also be needed in payments collected by direct debit, where the supplier collects only the taxable amount, informing the customer on the invoice on the split payment (by reference).

As the supplier will not receive/collect the VAT amount together with the taxable amount of the supply, there would be a **negative impact on his cash flow,** equal to the VAT charged and usually collected (based on regular payment terms) within the taxable period. The option may in certain circumstances also create for some suppliers a **limited positive cash flow effect** if compared to current output VAT balance payments together with the periodic VAT return (e.g. if the supplier would be currently required to pay output VAT on supplies where they have not yet received the payment from the customer, thus pre-financing the VAT payment themselves).

As split payment is applied only to B2B transactions, the supplier would need to **identify the status of his customer** at the time of the supply. Reasonable proxies may need to be provided to facilitate this obligation. The option creates a risk that suppliers would have bias towards identifying their customers as final consumers in order to be able to charge VAT (and reduce cash flow cost). Incorrect status could be used also for avoidance and fraud. Such risk could be mitigated by making the customer input VAT deductions dependent on having a correct VAT invoice, including a clear reference to VAT split payment. Going a step further, the input VAT deduction right could also be linked to actual VAT paid under the split payment mechanism, as in case of split payments the customer should have already paid the VAT they want to deduct.

The supplier submits his **periodic VAT return**, as currently, where he declares VAT on his taxable supplies subject to split payment (based on chargeability, so potentially including VAT not yet paid by the customer), output VAT collected (e.g. on B2C transactions) and input VAT. For the purposes of the impact assessment carried out in the study, an assumption is taken that the VAT return periods would not be changed in order to limit the changes made to the regime and isolate the assessment of the impact of split payment. Shorter VAT return periods (e.g. monthly instead of quarterly) would multiply the cost of submission of a VAT return, however these may also enable faster input VAT refunds and thus reduce cash flow cost.

In addition to regular VAT returns, a supplier would also now need to submit together with the periodic VAT return a **split payment sales statement**, with the full list of invoices issued to business customers liable to split the VAT for which VAT has become chargeable during the tax period. The statement needs to contain the invoice reference, the customer VAT identification number and the amount of VAT payable (as a minimum). As the supplier is not liable for the payment of VAT, he would not need to check or know whether VAT has been actually paid by the customer. This statement is a new obligation (in most Member States), but necessary to enable tax authorities to match VAT charged and VAT paid and check the compliance of customers liable for VAT payment (to tackle potential 'missing customer' fraud). Significant ERP, IT system changes are likely to be necessary to enable the submission of such transactional statements (without threshold). As some Member States have already introduced such statements (e.g. Estonia, Bulgaria) the experience in these countries was used to measure this cost.

Any **corrections** would need to be declared also on the sales statement.

In addition to the preparation and submission of such transactional statements, the supplier would also be obliged to **keep detailed records** of all transactions subject to split payment, for the purposes of a tax audit by tax authorities. Tax authorities may request these records to be kept in a specific format, e.g. as SAF-T. Therefore, this obligation is likely to require some system changes.

Customer

The customer would be **liable for splitting the VAT** and paying it over to the tax authority on a transactional basis. So the customer becomes liable for the VAT payment, instead of the supplier. The customer can split the VAT based on the invoice received from the supplier, which should contain the exact amount of VAT to be paid. The VAT payments would need to include a reference to the VAT identification number of the supplier (and/or invoice), to enable matching with transactions declared in the supply and purchase statements. The VAT payment would need to be made at the same time as the payment for the supply or at the latest at the time of submission of the VAT return related to the period where the chargeable event occurred.

Regarding the impact of this new obligation on administrative burden and cash flow, the main costs would be the system changes required to enable and record split payment and the cost of the **high number of additional VAT payments** (bank transfers) to the tax authority (equal to the total volume of taxable B2B purchases). In order to decrease the number of payments, enabling grouped and periodic payments (e.g. daily or weekly) could be considered.

The customer submits also the **periodic VAT return**, to declare his output VAT (split VAT and non-split VAT) and input VAT (VAT split by them and any non-split VAT (e.g. on import)). As above, the VAT return periods are currently considered to remain the same as now.

The business as a customer would also need to submit a **split payment purchase statement,** with a full list of purchase invoices received for which VAT has become chargeable during the tax period, including VAT identification numbers of suppliers and VAT charged (as a minimum), in order to enable the tax authority to carry out an 'invoice matching'. This would be in most member States a new obligation and require system changes. The experience of Member States that already require sales/purchase statements, namely Estonia and Bulgaria, confirms that it is considered necessary by tax authorities to gather information from both sales and purchases side. In case of split payment, the statement of sales invoices would provide a proof of transactions where the VAT liability has been shifted to the customer (thus releasing the supplier form this obligation), whilst the purchase statement would be used to check the VAT compliance of the customer, potentially provide the basis for the customers' right of VAT deduction, as well as enable to check any mismatches, e.g. false declarations by a supplier who wanted to increase the amount of sales where VAT is not collected. The administrative burden of the purchase statement is considered to be comparable to the burden of the sales statement of supplies.

The customer would also need to **keep detailed records** of all purchases subject to split payment and may be required to adjust the systems in order to keep records in a specific format, e.g. as SAF-T.

In a case where the customer has received invoices, but has not yet paid for the supplies by the deadline for submitting the VAT return, he would still need to pay the respective VAT amount to the tax authority at the time of submission of the VAT return related to the period wherein the taxable event has occurred. This will have a **negative impact on his cash flow**. The remaining payment for the supply can take place also later, in accordance with the payment terms agreed with the supplier. Although it is a new obligation and has cash flow effects, it mirrors the current VAT obligation of the supplier and should not therefore have a significant new impact. This arrangement would ensure timely VAT collection by the tax authority. However, it needs to be considered how to avoid potential confusion (business knowing when VAT has been pre-paid on the supply and when not) and simplify compliance control by tax authorities regarding later payments where VAT has already been paid.

Tax authority

The tax authority will receive a high number of VAT payments from customers, with a reference to the transaction. Tax authority will need to adjust their systems to be able to receive near real time VAT payments, **process these payments and record** on relevant supplier taxpayer accounts. It could be analysed how this processing cost relates to the number of payments and if found that a smaller amount of payments would significantly decrease the cost, grouped (e.g. by supplier) and periodic payments (e.g. daily or weekly) could be considered instead of transactional. Such VAT credit record could also be used to provide pre-filled VAT returns to businesses to reduce their administrative burden, valuable especially for SMEs not using an ERP system.

The tax authority will receive VAT payments earlier than under the current system, therefore the option will have **significant positive cash flow effect** on government revenue. The extent of this cash flow effect will depend on the VAT refund regime applied and whether it would be changed (e.g. enabling faster refunds) as a result of this option.

The tax authority will also receive **periodic VAT returns** from suppliers and customers and needs to process these. This obligation does not in itself differ from the current system, so the impact to administrative cost should be limited.

The introduction of the **transactional sales and purchase statements**, which would be submitted periodically, by current assumption together with the VAT return, will increase the administrative cost of tax authority. The IT systems would need to be adjusted to enable processing/matching the statements and comparing them with summarised data on VAT return and with VAT payments made by the customer. However, important to take into account that VAT payments cannot match fully with VAT declared, as some VAT payments may have been done on the following taxable period. Recurrent administrative costs are likely to increase as well, e.g. due to routine compliance actions in case of identified mismatches.

Impact on EU VAT legislation

Implementation of this policy option would require a number of legislative changes in the VAT Directive[115] as analysed above. If introduced as an optional measure for Member States, as suggested, it would be most appropriate to legislate it as a separate section for a Split Payment Special scheme, containing the following derogations from the general VAT regime:

- New definitions need to be added, such as B2B transaction and EFT payment method (new provision);
- Change of VAT payment liability from supplier to customer in relation to supplies covered by the split payment regime (derogating from Article 193);
- Changes to the time of VAT payment for B2B supplies covered by split payment, legislating that VAT needs to be paid at the time of the payment for the supply or at the latest at the time of submission of the VAT return for the taxable period wherein the supply took place (derogating from Article 206);
- Changes to VAT deduction rules on transactions subject to split payment, linking it with VAT payment (i.e. customer can only deduct the VAT he has paid to the tax authorities), as an optional measure for Member States (derogating from Article 167);
- Changes to the content of the VAT invoice, including a reference to split payment and separate payment instructions for VAT payment (derogating from Article 226);
- Changes to the content of the VAT return, requiring separate declaration of the VAT charged subject to split payment (as a supplier) and VAT paid under split payment scheme (as a customer) during the taxable period (derogating from Article 251);
- Obligation to submit transactional sales and purchase statements (new provisions);
- Obligation to keep detailed records of transactions (both supplies and purchases) subject to split payment (further clarification of Article 242, not a derogation).

[115] Council Directive 2006/112/EC

In addition, introduction of some supporting rules may be necessary in the VAT Implementing Regulation[116], such as:

- Proxies for identification of the customer status, B2B or B2C.

Main advantages

Split payment as designed in this policy option would provide main advantages **for tax authorities**, as they would collect VAT faster than in the current regime, which has a significant positive impact on cash flow. Also, the policy option provides them with detailed transactional information on B2B supplies subject to split payment and it would allow the customer to only deduct the VAT when his split payment obligation has been met. These different aspects of the scheme are expected to considerably reduce (certain type of) VAT fraud and avoidance.

The main advantage of split payment in this policy option **for the supplier** is the relief from the VAT payment liability. Another limited advantage would be a potential simplification of receiving (partially) pre-filled VAT return. No significant advantages were identified **for the customer**.

Main advantage of this policy option **in comparison to the other options** is that it is easiest to design and apply a split payment mechanism to B2B EFT transfers. Business customers are better placed to cope with such additional obligations. Also, the scope limitation would reduce the cash flow impact for the supplier and for the customer reduce the cost and administrative burden related to making the split payment (such as e.g. making two payments).

Main disadvantages

The main disadvantage of split payment in this policy option **for the supplier** is significant negative cash flow impact. The main disadvantages **for the customer** are the new liability for VAT payment, resulting in extra administrative and financial processes and increasing the number of additional financial transactions (VAT payments). Other disadvantages for business in both supplier and customer position are the new administrative obligations of submitting transactional statements and keeping detailed records.

For **tax authorities**, the main disadvantage of split payment in this option would be the increased administrative cost of processing the additional information collected and of addressing the mismatches between the different statements received.

The main disadvantage of this option **in comparison to other policy options** is the risk that the limited scope influences business decisions, creates distortions and may be less effective as an anti-fraud measure by leaving room for fraud and avoidance to shift to transactions not covered by split payment (e.g. B2C and non-EFT transactions). A limited scope may also increase the complexity and administrative burden of the business, which would need to identify the status of their customer or limit payment methods to be used by the customer.

[116] Council Regulation (EU) 282/2011

6.3.2 Option 1(b) - Option 1 with a blocked VAT bank account

Scope

This option builds on Option 1 and contains therefore a split payment on EFT in B2B transactions. However, in this policy option, a blocked VAT bank account would be used.

A customer would pay the taxable amount towards the regular bank account of the supplier, whilst the VAT on this supply would be paid towards the blocked VAT bank account of the supplier. Funds on such a blocked VAT bank account could only be used to pay input VAT towards another blocked VAT bank account or a (VAT) debt towards the state. Inclusion of blocked VAT bank accounts would reduce the negative cash flow impact on suppliers.

Description and rationale

- **Splitting agent:** customer or contracted intermediary
- **Liability**: the supplier is liable for VAT payment and invoicing with VAT
- **Other considerations:** no threshold is applied; full amount of VAT split and paid at the time of underlying payment
- **VAT declaration:** customer and supplier submit their periodic VAT returns as in current system
- **Cross-border supplies:** no split payment on cross-border supplies where intra-EU acquisition or reverse charge is applied
- **Optionality:** split payment mechanism would be optional for Member States, but mandatory for businesses
- **Chargeability**: VAT becomes chargeable at the time of supply (as now)

As in Option 1, the **customer** would have the **responsibility to split the VAT amount** on transactions where VAT is charged by the supplier[117], but pay the VAT amount towards the blocked VAT bank account of the supplier. Liability however still rests with the supplier who is liable for the correct calculation of VAT on his invoices and for declaring the VAT payable in his VAT return (periodical) as well as for the payment of the net VAT balance due for the period from his blocked VAT account.

As in Option 1, the customer can contract an **intermediary** to carry out his VAT obligations.

As the **liability** for VAT payment to tax authorities lies in this option with the supplier, the supplier will need access to the blocked VAT bank account for at least two reasons. Firstly he needs to have access to the information to check whether his customer has paid VAT to his blocked account. Secondly he needs to be able to use any funds available for input VAT payments and for VAT return balance payments. The supplier may also need a possibility to top up their blocked VAT account. There are thus no changes in VAT liability in comparison to the current regime.

The **other design features** of the split payment and related considerations would remain the same as in Option 1, except the transactional sales and purchase statements. The sales and

[117] Therefore, for example exempt or zero-rated transactions (including export) and transactions subject to domestic or cross-border reverse charge would be excluded.

purchase statements are considered not essential in this Option, as the liability for VAT payments remains fully on the supplier, therefore there is less need for transactional sales and purchase matching.

Roles and obligations of stakeholders

Supplier

Obligations for the supplier would be similar to the obligations in the current regime, except for **setting up and using** a second bank account, that of **the blocked VAT bank account**. All invoices should be also issued with **two bank account references**.

As the supplier will not receive/collect the VAT amount together with the taxable amount of the supply on its normal bank account but on the blocked VAT bank account, there would still be a **negative impact on their cash flow, albeit more limited than under Option 1**.

The most intrusive change for suppliers will be the **need to check the receipt of VAT payments** from customers to their blocked VAT account and the **need to reconcile** the data of two bank accounts and two flows of cash through their accounting systems. This may significantly increase the administrative burden of the supplier businesses.

As in Option 1, the supplier would still need to **check the status of the customer** at the time of supply and **add a reference to split payment to the invoice**.

The supplier submits a **periodic VAT return**, where he declares his output VAT, as currently. So output VAT contains any VAT on supplies subject to split payment (based on chargeability, so potentially including VAT not yet paid to his blocked account), output VAT charged on supplies not subject to split payment (e.g. on B2C transactions) and input VAT. Resulting net **periodic output VAT payment** to tax authorities would need to be made from his blocked VAT bank account. However, in case the funds on the account are not sufficient, the remaining part would need to be paid from his regular bank account, resulting thus potentially in two payments (as alternative, business may be allowed to make payments to its own blocked VAT account, to 'top up' the balance when necessary). Should the supplier be entitled for a **VAT refund**, the tax authorities could make the refund payment also to his blocked VAT bank account[118].

The supplier would also be obliged to **keep detailed records** of supplies subject to split payment and reconciliations with blocked VAT bank account, for the purposes of a tax audit by tax authorities.

Customer

The customer has to **split the VAT** based on the invoice received from the supplier, which should contain the amount of VAT and the number of the supplier's blocked VAT bank account. The VAT payment would be made from the customer's blocked VAT bank account,

[118] Special arrangements would be necessary for businesses who are continuously in credit position due to the nature of their activities (e.g. mainly dealing with export).

however if he has no sufficient funds on that account, an additional payment may be necessary from his current account (or by 'topping up' its blocked VAT bank account). The VAT payment would need to be made at the same time as the payment for the supply, as also in the current regime.

The main costs would be the system changes required to **enable and record split payments from multiple bank accounts** and the cost of a **high number of additional VAT payments** (bank transfers) to the blocked VAT bank accounts (equal to the total volume of taxable B2B purchases).

The customer submits also the **periodic VAT return**, to declare his output VAT and deductible input VAT. As above, the VAT return periods are considered to remain the same as now.

The customer would also need to **keep detailed records** of all purchases subject to split payment and may be required to adjust the systems in order to keep records in a specific format, e.g. as SAF-T.

Tax authority

Process-wise for tax authorities **little would change** in comparison to the current regime, except the fact that most VAT refund payments would need to be made to businesses' blocked VAT accounts (except special arrangements when necessary). They do however receive an extra certainty that VAT is paid to a blocked account at some point in time in a supply chain, with limited access for the taxable person and which can be used only for other VAT payments. Giving the tax authorities the right to access the blocked VAT account data as and when needed could also be considered.

There is **no positive cash flow effect** on government revenue. Payment of VAT towards the account of the government is executed at the same moment in time as it is in the current regime. The only difference when a blocked VAT bank account is used, is the fact that those funds will already have been earmarked as VAT funds and cannot be used for any other purpose by businesses.

Banks

Banks would need to **set up blocked bank accounts** for all VAT registered businesses and **limit the use of these bank accounts**, enabling only payments to be made from these accounts towards the tax authority or towards another blocked VAT bank account. Banks would therefore need to make system changes to enable this and bear (potentially significant) additional costs.

Impact on EU VAT legislation

Implementation of this policy option would require a few legislative changes in the VAT Directive. If introduced as a Split Payment Special scheme, containing the following derogations from the general VAT regime:

- New definitions need to be added, such as B2B transaction and EFT payment method (new provisions);
- Changes to the content of the VAT invoice, including a reference to split payment and separate payment instructions for VAT payment (providing blocked VAT bank account details) (derogating from Article 226);
- Additional provision on customer's obligation to separate the VAT and pay it to supplier's blocked VAT bank account (new provision, could be added to Article 206 or as a separate Article right after)
- Obligation to keep detailed records of transactions (both supplies and purchases) subject to split payment (in accordance with Article 242).
- Allow Member States to make VAT refund payments to the blocked VAT bank account (i.e. limiting business use of these funds);
- Require Member States to set up a procedure that enables businesses to apply for VAT refund payments to other bank accounts than blocked VAT account, if required (e.g. for mainly exporting businesses).

In addition, separate legislation is needed obliging banks (or obliging businesses to require from banks) to:

- Set up blocked VAT bank accounts for all VAT registered businesses; and
- Regulate the limited access to and use of blocked VAT bank accounts by businesses.

Introduction of some supporting rules may be also necessary in the VAT Implementing Regulation[119], such as proxies for identification of the customer status, B2B or B2C.

Main advantages

Split payment as designed in this policy option would provide advantages **for tax authorities**, as they would get reassurance that funds paid once as VAT, are kept on blocked bank accounts until they are paid either to another blocked VAT bank account or towards the tax authority after filing a return. That way for example missing trader fraud within a B2B context becomes nearly impossible given the fact that for every taxed supply VAT is paid only to a blocked bank account. As the Bulgarian experience has shown, it is of great importance however that there are no exceptions to this rule (i.e. even the VAT charged on B2C supplies or where cash is used would need to end up on blocked VAT bank account, which seems technically nearly impossible). Once a business is able to forego the obligation to use the blocked VAT bank account and collect VAT directly, the system is not fraud proof.

Another advantage of split payment in this policy option, in comparison to other split payment models, is the **reduced cash flow impact for suppliers**. At the level of the customer, compared to other split payment options the liability of the customer and his related administrative burden would be reduced.

[119] Council Regulation (EU) 282/2011

Main disadvantages

The main disadvantage of split payment in this policy option **for the supplier** is significant increase in compliance and reconciliation effort for each invoice of which VAT is split and (limited) negative cash flow. The main disadvantages **for the customer** are the high number of additional financial transactions (VAT payments), as well as reconciliation of different bank accounts and limited access to funds on blocked VAT account.

For **tax authorities**, there are little changes.

Regarding **non-compliance**, there is a risk that the customer does not make the VAT payment to the blocked VAT account, but e.g. pays it with the rest of payment to supplier's account or does not pay VAT at all. As the customer has no VAT liability, it would not cause loss of revenue, but would still create issues, especially for suppliers. Therefore, suitable mitigation measures should be foreseen.

A disadvantage of this option **in comparison to other policy options** is the risk that the business has still some access to the VAT funds, which in combination to supplies not included in split payment regime (e.g. B2C supplies) could be used for new types of VAT fraud.

6.3.3 Option 2 - Option 1 combined with a generalised reverse charge mechanism in certain Member States

Scope

This option builds on Option 1 and contains therefore a split payment on EFT in B2B transactions. However, it would combine the application of split payment with an application of a general reverse charge mechanism (GRCM) in some Member States[120]. As foreseen in the legislative proposal, it is assumed that generalised reverse charge applies to B2B transactions with invoiced amount of EUR 10 000 or above where the business customer is established in the Member State applying the general reverse charge. The GRCM would apply irrespective of the type of payment.

Description and rationale

Based on Option 1, the split payment is applied to domestic EFT in B2B transactions, but not applied to cross-border transactions where the customer is responsible for accounting for VAT. In the Member State(s) applying GRCM, reverse charge is applied also to domestic B2B transactions.

As far as split payment and GRCM would apply in this policy option to the same (domestic) supplies[121], the regimes are by nature **mutually exclusive**.

[120] Commission proposal COM(2016)811 Amending the VAT Directive to include the temporary application of a generalised reverse charge mechanism in relation to supplies of goods and services above a certain threshold, https://ec.europa.eu/taxation_customs/sites/taxation/files/com_2016_811_en.pdf consulted 10 January 2017.

[121] Although the scope of GRCM is wider assuming that it is not dependent on the type of payment.

The features of Option 2 would therefore be identical to those of Option 1, but the scope of application would be significantly reduced.

It should be noted that it would be possible to apply split payment (as designed in Option 1) to B2B transactions not covered by GRCM, i.e. supplies below EUR 10 000 threshold. Therefore, it could be a choice of a Member State whether to apply a split payment regime or GRCM or attempt to combine the two based on the transaction value. For the purposes of this study and impact assessment of this policy option, it has been assumed that Member States are not combining the two mechanisms based on transaction value, as it is unlikely a Member State would choose to do this due to resulting complexity of the VAT regime.

Therefore, as neither mechanism applies to cross-border transactions, there should be generally no impact on Member States applying different mechanisms, considering the VAT obligations or their consequences.

Further analysis may be needed on more complex supply chains where non-established suppliers (or customers) would become liable for VAT on certain cross-border supplies in the Member State applying a different regime (either split payment or GRCM) than its Member State of establishment. Any potential new fraud and avoidance possibilities from a parallel application of two mechanisms in (potentially bordering) EU Member States may need also further assessment. Due to limited interaction of the two regimes, no such opportunities were identified during the analysis carried out for the study.

Roles and obligations of stakeholders

Supplier

The role and obligations of the supplier in a Member State, which is not applying GRCM would be the same as in Option 1. The assessment of obligations of businesses in the Member State applying GRCM is outside of the scope of this study. However, internationally trading EU business, having domestically taxable supplies in a number of Member States, may need to adjust their systems to be able to fulfil tax obligations of both split payment and GRCM mechanisms.

Customer

Similarly, the role and obligations of the customer in a Member State which is not applying GRCM would be the same as in Option 1.

Tax authority

The tax authority would have a choice whether to apply split payment or GRCM as a measure for tackling VAT fraud. The role of the tax authority in a Member State choosing to apply split payment would be the same as in Option 1.

Impact on EU VAT legislation

Implementation of Option 2 would require the same legislative changes as in case of Option 1. However, in addition it could be considered whether to legislate that if the Member State applies GRCM, they cannot choose to apply also split payment for transactions not covered by GRCM. The purpose of such provision would be to protect businesses against a very complex and burdensome combined national VAT system.

Main advantages

The main advantage of this option **for the tax authority** is the flexibility of a Member State to choose and apply a regime considered most suitable for tackling VAT fraud in their national context.

Main disadvantages

The main disadvantage of this option **for businesses** is the added complexity and administrative burden when trading internationally and having to be able to apply different VAT mechanisms.

6.3.4 Option 3 - Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)

Scope

This policy option builds on the Option 2 and therefore applies split payment to EFT transfers in B2B transactions in a context where some Member States may apply a GRCM. Option 3 extends the split payment mechanism further to also cover EFT transfers in B2C and B2G transactions.

Description and rationale

The design of Option 1 is applied with following differences and additions:

- **Splitting agent on B2G**: customer or contracted intermediary
- **Splitting agent on B2C**: supplier or contracted intermediary
- Cross-border supplies: similarly to Option 1, split payment is not applied to B2G supplies where the customer is liable to account for VAT in the Member State of destination. Split payment is also not applied to cross-border B2C supplies where the supplier is using the one-stop-shop regime to declare and pay VAT. Split payment would be applied where a cross-border B2C transaction is treated as a domestic supply or where the supplier is registering for VAT directly in the Member State of destination.

This option extends the split payment to supplies to public bodies (B2G) and to individuals (B2C).

According to the current VAT regime, in specific situations public bodies as non-taxable legal persons are already obliged to fulfil certain VAT obligations as a customer, such as declaring VAT on intra-EU acquisitions above a threshold. In addition, the customer split approach is currently applied also in the Italian pilot regime for B2G. Therefore it is considered appropriate to **treat B2G transactions similarly to B2B** by requiring public bodies as a customer to become a splitting agent and having liability for the payment of VAT, but allowing them to contract an intermediary (agent) to carry out their (limited) VAT obligations.

In contrast, it is not considered appropriate to oblige individuals to split the VAT on **B2C transactions**, even where the payment is made by EFT (where it may be technologically possible). Although private individuals may also already be obliged to pay VAT to tax or customs authorities in specific circumstances, such as on import or when purchasing new means of transport, these are one-off requirements and quite dissimilar to regular VAT obligations. In addition, compliance control of a split payment mechanism relying on individuals to pay VAT directly to tax authorities, would be highly challenging and costly.

Therefore, the option suggests to require instead the **supplier to split VAT** or to contract an intermediary to fulfil their respective VAT obligations. Therefore, the supplier would still charge VAT on supplies to private individuals, collect it and pay over to tax authorities.

Despite the objective of split payment to collect VAT before it reaches the supplier, in case of B2C transactions it could be considered most appropriate as well as practical (i.e. the only feasible option) to continue to oblige the supplier to collect VAT and pay it to tax authority. As a difference between the current regime and a 'split payment' by the supplier (although strictly not qualifying as such), the supplier (the retailer) would be required to account for VAT on their B2C supplies and **pay VAT** on near real time basis, e.g. **once a day**. A daily VAT payment based on e.g. previous day's sales data could be challenging for certain type of businesses (e.g. smallest retailers), in which case it could be considered to allow them to base their daily VAT payments on average daily VAT amount of the previous tax period and corrected on the periodic VAT return (with necessary additional clauses to support seasonal traders).

Similarly to Option 1 (see section 6.3.1.), it would be legally and practically challenging to shift the liability for VAT and/or splitting to an **intermediary** in case of B2C EFT transactions (except perhaps in case of identifiable interfaces, platforms and marketplaces, as on B2C e-services), therefore it is suggested that the use of an intermediary would remain optional. Also, as an intermediary would bear additional costs which it would recoup from suppliers, the suppliers should have an option to carry out their VAT obligations themselves.

The **other design features** of the split payment would remain the same as in Option 1 (e.g. no inclusion of partial VAT split or thresholds) in order to keep the system as simple as possible and limit possibilities for avoidance, e.g. it is likely to be easier to abuse a transaction threshold on B2C transactions due to lower average values of supply.

As the option suggests that VAT on B2C transactions is paid to tax authorities once a day, not on transactional basis, the application of a threshold would not further reduce the administrative burden. Instead it may increase it as a supplier would need to separate transactions below and above the threshold and apply two regimes. A threshold would still reduce the cash flow impact, but other measures (such as faster VAT refunds to certified taxable persons) may be on balance preferable.

Regarding **cross-border B2C supplies**, it is considered disproportionately burdensome and complex for both business and tax authorities to apply split payment to supplies where the supplier uses the one-stop-shop system for declaration and payment of VAT. Therefore these supplies are also excluded from split payment, despite the fact that this creates potential limited distortions between cross-border and domestic B2C supplies (i.e. from different impact on cash flow from VAT payment timing differences). Potential avoidance and fraud schemes involving such distortive application may be considered for further analysis, although the impact is expected to be limited.

This policy option should not have any additional impact on Member States applying a **general reverse charge mechanism**, as split payment is not applied to cross-border B2G and B2C supplies.

Roles and obligations of stakeholders

Supplier

In comparison to Option 1 and 2, the supplier would have some additional VAT obligations regarding B2G and B2C supplies.

On **B2G supplies**, the supplier would need to extend the obligations applied to B2B supplies, such as new transactional reporting requirements and changed invoicing, also to B2G supplies[122]. The supplier would not be liable anymore for VAT payments on B2G supplies.

On **B2C supplies**, the supplier would continue to be liable for VAT and charge and collect VAT from final customers. As a new obligation, suppliers would need to calculate the VAT collected and pay VAT over to tax authority on a near real time basis (for the purposes of the impact assessment in this study daily payments are taken as a basis). As VAT is still paid by the supplier and not on a transactional basis but daily, there would be no need to introduce any new B2C invoicing rules. The new VAT payments could be based on VAT collected (i.e. actually paid by customers), but as the chargeability rules would not change, the supplier would need to declare together with the submission of the periodic VAT return also any VAT legally due, but not yet paid by customers during the taxable period (as now). There is no need for more detailed statements to accompany the VAT return, as the supplier collects and pays VAT on B2C supplies, customers have no VAT related rights and therefore there is no need for any matching.

[122] The suggested B2G model does not reflect directly the existing B2G model in Italy.

Customer

The role and obligations of a **business customer (B2B)** would be the same in this Option as in Option 1.

The public bodies as customers in **B2G transactions** would become liable for the payment of VAT on purchases and would need to pay it to the tax authority on transactional basis. However as these customers are public bodies, it could be considered to reduce their additional administrative burden by allowing grouped payments (e.g. by supplier). They can rely on the VAT calculation on the invoice provided to them by the supplier.

In order to be able to start making VAT payments, such public bodies would need to be identified for VAT purposes (if not already registered for intra-EU acquisitions). However, as they would not have VAT deduction rights, this registration may differ from the usual VAT registration. Similar to intra-EU acquisition VAT registrations for VAT exempted taxable persons or non-taxable persons, such registration may only trigger reporting obligations if in scope transactions occurred in the tax period, may not be equipped with a current account towards the tax authorities, etc.

Public bodies would need to provide also **purchase statements** with detailed transactional information, in order to enable tax authorities to match VAT payments to the suppliers. As business customers, public bodies would need to **keep records** of their purchases subject to split payment.

Private individuals in **B2C transactions** would not have any new VAT related obligations and would continue to pay VAT to suppliers together with the payment of the net value of the goods or services.

Tax authority

The tax authority would receive significantly higher number of **VAT payments** under this option, due to additional payments from public bodies on B2G transactions and suppliers' daily payments on B2C EFT transactions. Therefore they need to have increased capacity to process these payments and register these as a VAT credit on supplier's taxpayer account.

The increased number of VAT payments will increase also the **positive cash flow effect** for government VAT revenue.

Regarding declaration obligations, tax authorities would need **capacity to process** additional detailed purchase statements from public bodies.

Impact on EU VAT legislation

In addition to the legislative changes required under Option 2, implementation of this policy option would require the following legislative changes to the VAT Directive:

- Additional new definitions, such as B2G and B2C transaction (new provisions);
- Change of VAT payment liability from supplier to customer in relation to B2G supplies covered by the split payment regime (derogating from Article 193);
- Change the time of VAT payment on B2C supplies, legislating that VAT collected from customers needs to be paid to tax authorities daily (derogating from Article 206);
- Extend the changes to the content of the VAT invoice (in Option 1) also to B2G supplies subject to split payment (derogating from Article 226);
- Additional changes to the content of the VAT return, requiring separate declaration of the VAT charged on B2C supplies (derogating from Article 251);
- Extend the obligation to keep detailed records of purchases to public bodies regarding B2G transactions subject to split payment (Article 242 clarification).

Main advantages

The main advantage of the option **for tax authorities** is the increased positive impact on cash flow and potential reduction of VAT avoidance and fraud. An advantage **for the supplier** would be relief from liability to pay VAT on B2G transactions subject to split payment.

In **comparison to the other options**, the main advantage of expanding a split payment to B2G and B2C is that it provides a better level playing field and reduces the risks of abuse and fraud, such as from the combination of supplies within and outside split payment in a fraud scheme.

Main disadvantages

The main disadvantage **for the supplier** is the added complexity and consequential increase in administrative burden, especially on B2C transactions. Despite applying split payment to both B2B and B2C supplies, the supplier would still need to identify the status of the customer, as the applied split payment regimes are different. A wider scope would also increase the negative cash flow impact.

A disadvantage **for the customer** in B2G transactions (public body) subject to split payment would be the additional administrative burden from VAT payments and related declaration obligations.

A potential disadvantage **for tax authorities** would be increased administrative costs from processing additional data flows and related compliance control.

In **comparison to the other options**, the main disadvantage is the increased complexity of the VAT system and related administrative burden for businesses, public bodies and tax authorities. It is also important to note that as in this option the supplier still collects the VAT on B2C supplies, its impact on the reduction of VAT fraud in that segment may be fairly limited.

6.3.5 Option 4 - Option 3 with extension of split payment to credit card and cash payments

Scope

This policy option builds on the Option 3 and therefore applies split payment to EFT transfers in B2B, B2G and B2C transactions in a context where some Member States may apply a GRCM. Option 4 extends split payment mechanism further to cover also other types of payment, such as credit card, cash and other yet uncovered payments (including e-payments such as PayPal, e-Wallet etc.).

Description and rationale

Design of Option 3 is applied with the following differences and additions:

- Regarding credit card payments made online **(remotely)**, the same split payment model is applied as to EFT (customer split on B2B and B2G, supplier split on B2C);
- Regarding credit card payments made in a shop **(locally)**, the same split payment is applied as to B2C EFT (supplier split), notwithstanding the status of the customer;
- Regarding cash, the same split payment is applied as to B2C EFT (supplier split), notwithstanding the status of the customer;
- Regarding other e-payments, same split payment is applied as to EFT (customer split on B2B and B2G, supplier split on B2C; with greater potential for use of intermediaries).

From the supplier and customer perspective, **credit card payments** can take a form of an EFT–like payment, where the card is used for a payment in online environment, or a cash-like payment, where the card is physically used in a shop.

Although the customer (in B2B and B2G transactions) can split the payment when paying with its credit card online (i.e. make two card payments), it would be more challenging and burdensome to apply split payment when a credit card is used in a shop. Although a business customer could be theoretically required by the supplier to make two card payments, it would mean that the supplier (retailer) would need to identify first the status of the customer on over the counter sale, which would be disproportionately burdensome (unless a clearly recognisable corporate credit cards was used). It is also likely that a large majority of credit card payments in a shop are B2C transactions.

Therefore, two different treatments are suggested: EFT like split payment to online credit card payments and B2C split payment (supplier split) when used in shop. This approach was considered as the most feasible solution, although it is not ideal for consistency purposes.

For **cash payments**, a pure split payment system (i.e. the customer making two payments) is impossible as in any case the complete amount would be physically received by the supplier. So the only way to improve compliance control on VAT collection regarding cash payments would be to oblige the supplier to 'split' the VAT and make more frequent (in this study considered daily, as on B2C supplies) VAT payments to the tax authority, as suggested in option 3 for B2C EFT transactions. Therefore this approach is taken also on all cash payments, notwithstanding the status of the customer.

It was considered whether to exclude cash payments from the split payment regime as it may seem disproportionately burdensome, but after consulting with business stakeholders (at the workshop) it was decided to include cash payments in the split payment mechanism due to reasonable risk of VAT fraud and avoidance shifting to the use of cash. In addition, some other measures, such as legal limitations to the cash transaction value, may be and are already applied in some Member States for other purposes (money laundering).

For **other forms of e-payment**, the same split payment models can be applied as on EFT in order to level the playing field and reduce risks of avoidance and avoid burden from application of different regimes to different types of e-payment. As the providers of such e-payment services may not all be covered by the SEPA regulatory limitations, it is possible that these businesses are better placed to take an optional wider role as an intermediary in split payment (on behalf of either the customer (in B2B/B2G) or the supplier (in B2C, cash).

Regarding **cross-border supplies**, no additional technical differences ought to be required, but further assessment is needed regarding the increase in cost from larger volume of international payments with credit cards.

This option should not have any additional impact for Member States applying a **general reverse charge mechanism**.

Roles and obligations of stakeholders

Supplier

The administrative obligations of the supplier collecting payments in cash (retailers) would increase, as they would need to start **calculating and paying VAT** collected on cash transactions or credit card payments in shops **per day** although at least the calculation of VAT is likely to become mostly automated. As in Option 3, it could be considered to allow applying the daily average VAT amount data of the previous tax period as a basis, where justified.

The option would significantly increase the **negative cash flow impact** on suppliers due to customer split on online credit card payments and daily VAT payments on other card payments and cash transactions.

The other obligations of the supplier would remain the same, but are just adjusted to the wider scope of split payment, as appropriate (e.g. invoicing, transactional statements re online credit card payments). The supplier would still need to identify the status of the customer (except on cash or credit card payments over the counter), as different regimes of split payment would apply. VAT paid daily on cash and over the counter credit card transactions would be recorded as a credit on the supplier taxpayer account.

The impact of the option on the administrative burden of the supplier would be mixed, as a wider regime may also reduce certain burdens (e.g. no need to track supplies based on type of payment, no need for separate VAT applications on supplies paid for via EFT and card payments). However overall the option is likely to increase the burden for the suppliers.

Customer

Business (or governmental) customers would become **liable for VAT** on B2B transactions **if paying with credit card remotely** (e.g. online or over the phone). The obligations applicable on B2B EFT transactions would apply also to these card transactions.

Therefore, customers need to make additional VAT payments at the time of payment for the supply and add these transactions in their transactional statements.

Tax authority

No significant change is expected in the role of tax authorities, but the **number of VAT payments would increase** as a result of expanding the scope to credit card and cash and **administrative costs may also increase slightly** due to additional processing and compliance control. The option would have again a **positive impact on government cash flow** and would **reduce the level of tax avoidance and fraud** due to the wide scope of the measure and reduced risk of fraud shifting.

Impact on EU VAT legislation

In addition to legislative changes required for implementation of Options 2 and 3, implementation of this policy option would require some other legislative changes in the VAT Directive, mainly the following (in addition to reviewing the other changes regarding the expanded scope):

- Additional new definitions, such as remote and local credit card payments (new provisions);
- Change of VAT payment liability from supplier to customer in relation to B2B and B2G remote credit card payments (derogating from Article 193);
- Change the time of VAT payment on cash and over the counter credit card supplies, legislating that VAT collected from customers needs to be paid to tax authorities daily (derogating from Article 206).

Main advantages

The main advantage **for both businesses and tax authorities** in expanding the scope to other payment types, is to further level the playing field and reduce the risk of VAT avoidance and fraud shifting to payments not covered by split payment. Additional advantage **for tax authorities** is the positive cash flow impact.

Main disadvantages

The main disadvantage is the increasing complexity and related administrative burden of businesses and tax authorities (regarding compliance control) of the split payment mechanism. Wider scope increases also negative cash flow impact on **the supplier**.

6.4 Options based on the definitive VAT regime

The second group of policy options is based on the definitive VAT regime, as described in Section 6.2:

	Options based on Definitive VAT Regime
Option 5	Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)
Option 6	Option 5 with extension of split payment on EFT to B2C and B2G
Option 7	Option 6 with extension of split payment to credit card and cash payments

The **main difference** between policy options 1-4 and 5-7 is the **potential application of split payment to intra-EU B2B supplies to non-certified taxable persons**.

Regarding generalised reverse charge mechanism, it is assumed that this derogation will discontinue on the implementation of definitive VAT regime, as foreseen by the Commission, and therefore there is no matching option for Option 2.

Also, no option with blocked VAT account was elaborated for the definitive VAT regime.

As for the options based on the current VAT regime, the design of the policy options based on the definitive VAT regime encompasses the following elements:

- Scope of the options;
- Description and rationale;
- Roles and obligations of stakeholders, i.e. supplier, customer and tax authority;
- Impact on EU VAT legislation;
- Main advantages; and
- Main disadvantages.

6.4.1 Option 5 - Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)

Scope

This policy option does not build on earlier options as it is based on an alternative VAT system: the definitive VAT regime[123], which will serve as an alternative baseline. Importantly, the definitive VAT regime does not change the VAT treatment of domestic transactions, but is intended to change the VAT rules on intra-EU cross-border B2B supplies by application of the

[123] As described in Section 3.5 above and in VAT Expert Group working paper no 57 https://circabc.europa.eu/sd/a/1f174f75-8a88-4f58-94b0-c2d748371ab6/57%20-%20Definitive%20regime%20for%20intra-EU%20trade%20-%20First%20step%20-%20Issues%20to%20be%20examined.pdf

destination principle[124]. As currently suggested, the definitive regime would, in a first phase, change also VAT collection rules by obliging the supplier to charge VAT on B2B supply of goods to non-certified taxable person (using the one-stop-shop (OSS) for declaration and payment), whilst applying reverse charge on B2B supplies to certified taxable persons (as currently applied on intra-EU services).

Therefore, as rules on domestic supplies would not be changed, the **main difference** between policy options 1-4 and 5-7 is the **potential application of split payment to intra-EU B2B supplies to non-certified taxable persons**.

Regarding generalised reverse charge mechanism, it is assumed that this derogation will discontinue on the implementation of definitive VAT regime, as foreseen by the Commission.

Option 5 is similar to Option 1 and applies split payment to EFT transfers in B2B transactions.

Description and rationale

Design of Option 1 is applied with following differences and additions:

- **Splitting agent** on intra-EU supplies (where VAT is charged): customer (or contracted intermediary);
- No split payment on intra-EU supplies to certified taxable persons, as no VAT is charged;
- **VAT declaration**: One-Stop-shop is used for VAT declarations on intra-EU B2B supplies;
- **Optionality**: mandatory for all Member States on intra-EU supplies, but could be left optional regarding domestic supplies.

Regarding **domestic supplies**, the same model of split payment could be applied as in Option 1, so VAT would be split either by a business customer or by an intermediary contracted by the business customer.

The customer (or an intermediary contracted by the customer) would be the **splitting agent** also on **intra-EU supplies** where the supplier is obliged to charge VAT (that is supplies to non-certified taxable persons). As on domestic transactions, the customer splits the VAT from the rest of the payment and pays it over to the tax authority of the Member State of supply (which would usually be the Member State where the customer is established).

Application of split payment to EFT on B2B intra-EU supplies in the definitive VAT regime would in essence return the VAT payment obligation to the customer in the Member State of consumption. This could be seen as turning back to the current VAT regime, however there are some significant differences. The main difference is that the supplier would remain liable for including the correct VAT amount on the invoice, although VAT is collected from the

[124] Place of supply of intra-EU supplies of goods would become the Member State where the transport of goods ends and supplier becomes liable for VAT, instead of VAT liability of the customer on intra-EU acquisition.

customer, who is liable to split and pay VAT on intra-EU purchases at the time of the main payment.

Split payment is not applied to intra-EU supplies to **certified taxable persons**, as these are subject to a reverse charge. Also, adding split payment obligations would reduce the effect of this simplification and is considered unnecessary due to assurance provided by certification.

Regarding **other considerations** on the split payment model, the same considerations apply as in Option 1, so no blocked VAT account, no threshold is applied and the full amount of VAT is split and paid at the time of the underlying payment.

Some adjustment would however be needed regarding the **declaration of VAT**. It has been proposed that in the definitive VAT regime a supplier uses the one-stop-shop to declare VAT due to other Member States.

In a split payment regime, where the customer pays VAT directly to the tax authority (of the Member State of taxation), but where the supplier remains liable for the correct calculation of VAT, there is a need for information exchange between the customer and the supplier. For instance, as is already the case in the regular application of the definitive regime, the supplier would need to know the **CTP status of the customer** (the CTP status of the supplier is not relevant here), as VAT would need to be charged on intra-EU supplies to non-CTP businesses (although in case of split payment, a separate marker would be added on the invoice regarding direct payment of VAT to the tax authority), but VAT would not be charged on intra-EU supplies to a CTP, in which case a reference to reverse charge would instead be marked on the invoice. Ability to check the CTP registration status easily and electronically is as important in this policy option as it is in definitive regime without split payment.

As in case of domestic split payment, the customer who pays VAT based on the invoice received from the supplier, would need to declare to his tax authority the purchases made together with the supplier's VAT registration number and VAT amounts paid.

Due to the cross-border impact of the split payment mechanism in the definitive VAT regime, it is considered necessary that the split payment is made **mandatory for Member States** at least regarding the intra-EU supplies. It could remain optional regarding domestic supplies. However, further analysis is needed on potential distortions of the application of a combination of both regimes and potential fraud and avoidance risks.

Roles and obligations of stakeholders

Supplier

The role and obligations of the supplier in this policy option would be generally the same as in Option 1. However, as split payment would be applied also to part of cross-border B2B supplies, the supplier would be **relieved from VAT payment liability** on supplies to non-certified taxable persons, but **some domestic split payment related obligations** would need to be extended also to these supplies (e.g. declaring these supplies in split payment sales statement). This would relate mostly to invoicing, as the supplier would need to calculate VAT and give payment instructions (by adding split payment reference) to the non-CTP business customer in another Member State, indicating to which tax authority account the VAT would need to be paid. It is not expected to increase the burden much, as suppliers would need to check and apply the VAT rate of the destination Member State also without the split payment. The supplier would also need to **check the CTP status of the customer** in another Member State, however suppliers have this obligation also in case of the regular definitive regime. The option would also create a **negative cash flow impact** to the supplier who would stop collecting VAT on covered supplies.

Customer

A business customer, who is not a CTP, would become **liable for VAT** payment on intra-EU purchases subject to split payment. Customer's **obligations related to split payment would be the same** as in Option 1 (including adding these purchases in split payment purchase statement), just extended to these additional cross-border purchases, which may increase their administrative burden.

Tax authority

Unlike in the definitive regime without split payment, the tax authority would receive the VAT payment regarding supplies covered by split payment directly from the business customer, who is likely to be established in the same Member State as the tax authority. Therefore, comparing to the baseline, the option would have a **positive impact on government's cash flow**. It ought to also **reduce the administrative cost** of tax collection for the tax authority, as there is no need to distribute relevant VAT to other Member States or wait for allocated payment from other Member States. Considering that the definitive regime may include also cross-border input VAT deductions through the OSS, up to the amount of VAT payable to the particular destination Member State, the reduction of the VAT payable through the OSS could mean that more VAT would need to be refunded through existing VAT refund schemes. This is likely to have a positive impact on tax authorities' cash flow, as cross-border VAT refunds are generally less frequent.

Impact on EU VAT legislation

Implementation of this policy option would require first the same legislative changes in the VAT Directive as in Option 1. However additional changes would be necessary to:

- Make application of split payment mandatory for Member States regarding intra-EU supplies to non-certified taxable persons (reflected in use of 'shall' rather than 'may' in relevant provisions);
- Make changes to the definitive VAT regime provisions to move the VAT liability regarding intra-EU supplies back to the customer and relieve the supplier from respective obligations (derogating from current Articles 193 and 194);
- Extend the provision on the time of VAT payment on split payment to relevant cross-border supplies (derogating from Article 206);

- Extend the provision on detailed purchase statements to relevant cross-border supplies (new provision).

Main advantages

The advantages of applying split payment to domestic transactions would be the same as in Option 1.

The main advantage of the application of the split payment regime on intra-EU transactions in a definitive VAT regime for the tax authority would be the collection of VAT from mainly domestic business customers instead having to rely on non-established suppliers to collect and pay VAT through the OSS (except on supplies to the certified taxable person).

The main advantage for business suppliers would be the relief from VAT payment liability on covered supplies [and a potential simplification in the OSS return].

Main disadvantages

Main disadvantage of the policy option is the potential added complexity for both tax authorities and businesses, especially for business customers who would have additional VAT obligations. However, the comparative complexity of the definitive VAT regime with and without split payment is not easy to assess due to the current lack of detailed information on the design and impact of the definitive VAT regime.

Regarding the cash flow impact, the policy option increases the negative cash flow impact, as suppliers would stop collecting VAT on intra-EU supplies to non-certified taxable persons when split payment is introduced.

The disadvantages of Option 1, such as risks of application to a limited group of transactions, are valid also on Option 5.

6.4.2 Option 6 - Option 5 with extension of split payment on EFT to B2C and B2G

Scope

Policy option 6 builds on Option 5 and contains therefore split payment on EFT on B2B supplies (including cross-border) in the definitive VAT regime. This option expands split payment to EFT on B2C and B2G transactions and is therefore similar to Option 3 described above.

Based on the current ideas on how the definitive VAT regime would apply to cross-border B2G supplies, the public bodies would be treated similarly to non-certified taxable persons, i.e. as regular business consumers with the supplier being required to declare and pay VAT through the OSS.

Description and rationale

- Combined design of Option 3 (split payment on domestic B2B, B2G and B2C supplies payable by EFT) and 5 (split payment on intra-EU B2B supplies to non-CTP, payable by EFT) is applied with no differences or additions;
- Split payment is applied also on cross-border B2G supplies requiring customer to split the VAT, on supplies where the supplier would have the obligation to charge VAT in the definitive regime (i.e. when the customer is treated similarly to a non-certified taxable person)
- Split payment is not applied to cross-border B2C supplies, where the supplier is using the OSS for VAT declarations and payments[125].

Regarding **domestic supplies**, the same model of split payment would be applied as in Option 3. Therefore, the customer (or contracted intermediary) would split VAT on B2B and B2G supplies and the supplier (or contracted intermediary) would 'split' VAT on B2C supplies.

Regarding **intra-EU B2B supplies**, the same model would be applied as in Option 5. Therefore, the customer (or a contracted intermediary) would split VAT on intra-EU B2B supplies where the supplier is obliged to charge VAT.

Considering the application of a split payment in the definitive VAT regime to **cross-border B2C and B2G transactions** (where the place of supply is in another Member State), as the supplier is obliged to charge and collect VAT on B2G supplies in the definitive VAT regime, it is considered most appropriate to apply a split payment to B2G supplies similarly to intra-EU B2B supplies.

It is also not considered appropriate and practical to apply a split payment to cross-border B2C supplies where the supplier is using the OSS for declaration and payment of VAT, as requiring the supplier to declare and pay VAT on these supplies more frequently would disproportionately increase the administrative burden for both businesses and tax authorities.

Roles and obligations of stakeholders

Supplier

Supplier's obligations on domestic supplies would be the same as in Option 3. Supplier's obligations on intra-EU supplies to non-certified taxable persons would be the same as in Option 5.

[125] After extension of the OSS to all cross-border B2C supplies of goods and services, there would be no cross-border B2C supplies subject to split payment

Customer

Similarly, business (and governmental) customer's obligations on domestic supplies would be the same as in Option 3. Non-certified business customer's (and similarly treated governmental customers) obligations on intra-EU purchases would be the same as in Option 5.

Tax authority

As above, the role and obligations of tax authority in this Option are the same as in Option 3 regarding domestic supplies and Option 5 regarding relevant intra-EU supplies.

Impact on EU VAT legislation

Implementation of this policy option would require the same legislative changes in the VAT Directive as in Option 1, 3 and 5.

Main advantages and disadvantages

Main advantages and disadvantages of Option 6 are the same as on Option 3 and Option 5.

6.4.3 Option 7 - Option 6 with extension of split payment to credit card and cash payments

Scope

Policy option 7 builds on Option 6 and contains therefore split payment on EFT on B2B, B2G and B2C supplies in the definitive VAT regime. This option considers expansion of split payment to credit card and cash payments and is therefore similar to Option 4 described above.

Description and rationale

- Combined design of Option 4 (regarding domestic B2B, B2G and B2C supplies, payable by EFT) and 6 (regarding intra-EU B2B and B2G supplies payable by EFT) is applied with no differences or additions;
- Split payment by the customer is extended to cross-border (remote) credit card payments on B2B supplies similarly to EFT as in option 6 (VAT split by customer);
- Split payment by the supplier is extended to cash-like credit card payments in shops and to cash payments as in option 4 (VAT split by supplier).

Policy option 7 is very similar to Option 4 and Option 6 and therefore the same analysis applies.

Regarding **domestic supplies**, split payment by the customer would be applied to online credit card payments, whilst split payment by the supplier is applied to cash-like credit card payments in shops or to cash payments.

On **cross-border supplies**, the only new consideration is the application of split payment to credit card payments on intra-EU B2B transactions. It is considered appropriate to apply split payment in the same way as to EFT where a credit card is used online on intra-EU B2B supplies. Split payment would not be applied to online credit card payments on cross-border B2G or B2C transactions.

Roles and obligations of stakeholders

Supplier

Supplier's obligations on domestic supplies would be the same as in Option 4. Supplier's obligations on intra-EU supplies to non-certified taxable persons would be the same as in Option 6 (and 5).

Customer

Similarly, business (and governmental) customer's obligations on domestic supplies would be the same as in Option 4. Non-certified business customer's obligations on intra-EU purchases would be the same as in Option 6 (and 5).

Tax authority

The role and obligations of tax authority in this Option are the same as in Option 4 regarding domestic supplies and Option 6 (and 5) regarding relevant intra-EU supplies.

Impact on EU VAT legislation

Implementation of this policy option would require the same legislative changes in the VAT Directive as in Option 1, 3, 4 and 5.

Main advantages and disadvantages

Main advantages and disadvantages of Option 7 are the same as on Option 4 and Option 6.

6.5 Overview of the policy options design

The table below provides a summary of the key features of the preliminary policy options and their main advantages and disadvantages.

Table 6: Key features of preliminary policy options

	Scope	Splitting agent (liability)	Cross-border	Optionality	Main advantages	Main disadvantages
Option 0 **Status Quo**	n/a	n/a	n/a	n/a	Application of known regime	Identified VAT avoidance and fraud risks
Options based on current VAT regime						
Option 1	EFT B2B	B2B: Customer	Not applied	MS: optional Business: mandatory	Supplier: relief from VAT liability Tax authority: positive cash flow impact; reduction of VAT fraud Easiest to apply to B2B, smaller negative cash flow impact	Supplier's negative cash flow impact Complexity re customer status Increased admin burden on businesses Increased admin. Cost for tax authority Risk of fraud shift to uncovered supplies
Option 1(b)	EFT B2B	B2B: Customer Blocked VAT account, Liability remains on supplier	Not applied	MS: optional Business: mandatory	Supplier: limited use of output VAT funds; reduced negative cash flow Tax authority: reduced fraud risk as access to funds limited, but supplier still liable for VAT	Supplier still liable for VAT payments Complexity re mixed use of bank accounts Increased admin burden on businesses Risk of fraud shift to uncovered supplies and linked abuse of blocked VAT account
Option 2	EFT B2B GRCM	B2B: Customer	Not applied	MS: optional Business: mandatory	Flexibility for MS to choose SP or GRCM	Added complexity for business re application of either GRCM, SP or regular regime in MS
Option 3	EFT B2B, B2G, B2C GRCM	B2B: customer B2G: customer B2C: supplier	Not applied	MS: optional Business: mandatory	Tax authority: positive cash flow impact More level playing field Reduced risk of fraud shift	More complex, increased negative cash flow impact for business

	Scope	Splitting agent (liability)	Cross-border	Optionality	Main advantages	Main disadvantages
Option 4	EFT, Credit card, cash B2B, B2G, B2C GRCM	B2B: customer B2G: customer B2C: supplier Cash: supplier	Not applied	MS: optional Business: mandatory	Tax authority: positive cash flow impact Further levelled playing field, reduced risk of fraud shift	Increased complexity, increased negative cash flow impact for business
Options based on Definitive VAT Regime						
Option 5	EFT B2B	B2B: Customer	Applied to B2B supplies to non-certified customers	MS: mandatory re intra-EU supplies Business: mandatory	MS: Collection of VAT from established businesses Supplier: relief from VAT liability; possible pre-filled OSS returns	Increased administrative burden on business customers Negative cash flow impact on supplier
Option 6	EFT B2B, B2G, B2C	B2B: customer B2G: customer B2C: supplier	Applied to B2B supplies to non-certified customers	MS: mandatory re intra-EU supplies Business: mandatory	Same as Option 3 and 5	Same as Option 3 and 5
Option 7	EFT, Credit card, cash B2B, B2G, B2C	B2B: customer B2G: customer B2C: supplier Cash: supplier	Applied to B2B supplies to non-certified customers	MS: mandatory re intra-EU supplies Business: mandatory	Same as Option 4 and 6	Same as Option 4 and 6

Source: Deloitte analysis

7 Cost-Benefit Analysis of the Policy Options

This section presents the results of the cost-benefit analysis of the policy options. Firstly an overview of the Policy Options is provided followed by an explanation of how the assessment results are presented. This is followed by a full assessment of the different impacts of the policy options. Finally, the key findings of the analysis are presented.

7.1 Presentation of the cost/benefit analysis

The table below provides an overview of the policy options designed for the study.

Table 7: Policy options for cost-benefit analysis

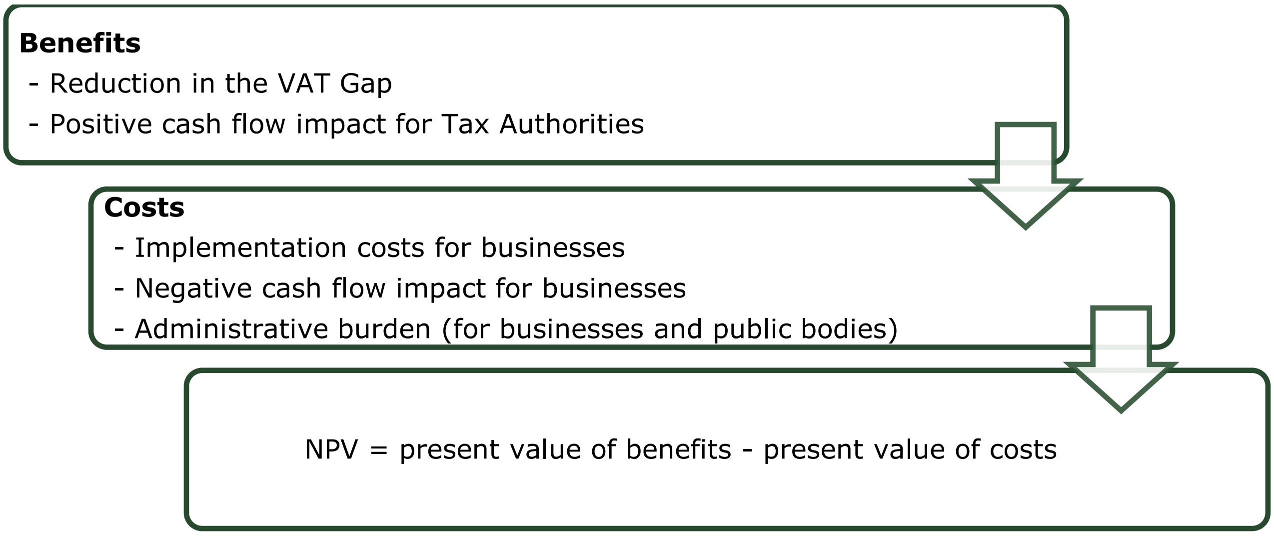
Number	Option description
Option 0	Status quo (current VAT payment system and definitive VAT regime)
	Options based on current VAT regime
Option 1	Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)
Option 1(b)	Option 1 with blocked VAT bank account
Option 2	Option 1 combined with a generalised reverse charge mechanism in certain Member States
Option 3	Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)
Option 4	Option 3 with extension of split payment to credit card and cash payments
	Options based on Definitive VAT Regime
Option 5	Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)
Option 6	Option 5 with extension of split payment on EFT to B2C and B2G
Option 7	Option 6 with extension of split payment to credit card and cash payments

Source: Deloitte analysis

The policy options above are assessed using a cost-benefit analysis (CBA).

The objective of this part of the study is to make a quantitative assessment of the costs and benefits associated with the different policy options discussed previously, regardless of which stakeholders will ultimately bear the burden or see the benefits. The CBA takes into account the costs and benefits of each of the policy options over the defined timeframe of the investment, which is discounted at the long-term cost of capital in order to first calculate and then compare the Net Present Value (NPV) of each option. The costs and benefits measured as part of this assessment are both transactional and recurrent.

Figure 10: Cost-Benefit Analysis Overview



Source: Deloitte analysis

As discussed in the methodology for assessment of the policy options note (see Annex B), the NPV of each option will depend on the timeframe chosen. The time taken for the split payment mechanism to be fully operational in the EU will impact the NPV. However, for the purposes of this study, it has been agreed with the Commission that, for all options, all legislation and implementation will be agreed and completed by 2020. Thus, the costs and benefits are projected over a ten-year horizon, from this date. This approach is taken so that the different options are comparable and it is acknowledged that actual timeframes may differ.

In the following sub-sections, for each of the policy options, the following impacts are assessed:

- Impact on the VAT gap, which encompasses impacts on the MTIC fraud, threshold fraud, on non-compliance, on VAT avoidance schemes and on other components of the VAT gap;
- Impact on VAT cash flow, both for businesses and for tax authorities;
- Impact on administrative burden of businesses and public bodies (in the case of B2G supplies);
- Implementation costs for tax authorities and businesses;
- Overall CBA.

Details on the assumptions and approach used for this analysis are in Annex B.

7.2 Option 0 – Status Quo

7.2.1 Option 0 – Status Quo (current VAT regime)

Option 0 is based on the status quo, i.e. the current VAT regime (without any split payment mechanism), and provides the basis for the CBA of options 1 to 4.

Below we present the key characteristics of this option in relation to the analysis of the policy options included in the study. This includes the following:

- VAT gap;
- Administrative burden for businesses (and number of businesses impacted); and
- Administrative burden for public bodies (and number of public bodies impacted).

Other characteristics that are used in the analysis of the policy options presented in the study, such as cash flow impact and implementation cost, are considered as neutral in the status quo or Option 0.

VAT gap

As discussed above (see section 3.2.2), the current VAT gap in the EU is estimated for the purposes of this study at EUR 150.2 billion[126]. This loss of revenue for tax authorities can be accounted for by various factors including missing trader intra-Community (MTIC) fraud, threshold fraud and types of non-compliance such as tax evasion and avoidance.

Out of these, the largest share is attributed to non-compliance issues (either genuine mistakes or fraudulent under-reporting of sales or also deliberate inflation of purchases to reduce VAT liability), which is considered to account for EUR 32.6 to 55.5 billion (or 22-37%) of the total VAT Gap. The MTIC fraud is estimated to be responsible for EUR 35 to 41.2 billion of the VAT Gap (corresponding to about 23% to 27% of the total), a similar proportion to VAT avoidance schemes, which is estimated to account for EUR 32.6 to 41.6 billion (corresponding to 22% to 28%) of the total VAT Gap. Additional components (i.e. threshold fraud, repayment frauds, insolvency) are residual causes of the VAT Gap, estimated to account for EUR 11.8 to 50.0 billion (or 8% to 33% of the overall VAT Gap). More details on the VAT Gap are provided in Section 3.2.2).

[126] Based on a combination of data collected for the study and Case, 2016: 'Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final Report'.

Administrative burden for businesses

The administrative costs facing businesses in the current situation were estimated using the Standard Cost Model (SCM).

The baseline costs were established taking into account the number of VAT-registered businesses in the EU and the numbers of businesses within each turnover category (categories are: Less than EUR 50 000; EUR 50 000 to 100 000; EUR 100 000 to 500 000; EUR 500 000 to 2 000 000; More than EUR 2 000 000).

The number of businesses impacted includes all VAT-registered businesses in the EU and is approximately **29 million** (i.e. 28 703 722).

The following table provides an overview of the VAT-registered businesses per turnover bracket estimated to be relevant to the study. Details on the sources and assumptions used to estimate such figure are provided in Annex B – Section B.3.2.

Table 8: VAT-registered businesses per turnover bracket (Status Quo – Current VAT regime)

Turnover bracket	Less than EUR 50 000	EUR 50 000 to 100 000	EUR 100 000 to 500 000	EUR 500 000 to 2 000 000	More than EUR 2 000 000
Number of businesses	16 248 406	3 780 781	5 807 553	1 923 350	943 632
% on the total number of VAT registered businesses	57%	13%	20%	7%	3%

Source: Deloitte estimates based on survey to Member States' tax authorities

The SCM first identifies Information Obligations (IOs) resulting from EU VAT legislation that a 'typical', VAT registered EU business has to comply with. It then estimates the costs related to these IOs. The IOs in relation to the baseline, were identified through interviews with businesses and Deloitte's tax expertise. The table below presents the set of IOs in the baseline.

Table 9: Information Obligations used in the Standard Cost Model (baseline)

IO#	Type of obligation	Frequency	Description for businesses
IO1	VAT registration	One-off	This IO consists of the one-off registration for VAT purposes in the Member State where the business is established. This includes all tasks necessary to complete the registration such as communication with the relevant authorities and the provision of evidence of taxable activities.[127]

[127] Waiting time is not calculated in the Standard Cost Model (SCM), e.g. time for the tax authorities to reply to requests, to finalise the registration, etc.

IO#	Type of obligation	Frequency	Description for businesses
IO2	Invoicing	Transactional	This IO consists of the invoicing for each transaction in accordance with the business' home country rules.
IO3	VAT declaration/ returns	Depending on the Member State: Monthly/bi-monthly/quarterly/annual	This IO consists of the periodical submission of the domestic VAT return and preparatory tasks.
IO4	VAT payment	Depending on the Member State: Monthly/quarterly/annual	This IO consists of the periodical payment of the VAT related to the business' domestic VAT return.

Source: Deloitte analysis based on desk research and interviews with businesses

It is clear that administrative costs for businesses differ between the size of the business and the industry. For this reason, the concept of one 'typical' business costs in the SCM was not applied for the calculations. Rather, estimates were calculated according to a 'typical' business within the different turnover categories. A weighted average was then applied to the overall costs for businesses for each IO. The table below presents the administrative burden costs for businesses in the baseline scenario.

Table 10: Administrative costs for businesses (Option 0 – Current VAT regime)

IO#	Administrative task	Total cost for all businesses (EUR)	Total cost for one business (EUR)
IO1	VAT registration	2.7 billion	94
IO2	Invoicing (domestic)	23.8 billion	831
IO3	VAT Return (domestic)	47.4 billion	1 652
IO4	VAT payment (domestic)	232.7 million	8
	Total	**74.2 billion**	**2 584**

Source: Deloitte estimates based on SCM analysis

From the table above, we see that the overall administrative burden for businesses in the baseline amounts to about **EUR 2 600** per businesses per year. For all VAT-registered businesses in the EU, the administrative costs amount to approximately **EUR 74.2 billion per year**. This accounts for approximately 0.51% of the EU GDP[128]

The detailed methodological assumptions for these calculations are provided in Annex C.

The detailed calculations on the SCM for the baseline and Option 1 are presented in Annex D. Annex D (section D.3) also contains and overview of the individual business costs and total costs for all businesses per each turnover category under each option.

[128] Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.

Administrative burden for public bodies

Regarding **public bodies**, it is assumed that there are currently no VAT-related costs applicable in relation to the IOs impacted by the introduction of the split payment.

The definition of public bodies used for this study is quite restrictive. For the purpose of the study, public bodies can be understood as only bodies of national, regional or local government. Other bodies governed by public law in the Member States (e.g. hospitals, schools etc.) are not taken into account for the calculations for public bodies as they are qualifying as B2B for these purposes.

The number of public bodies affected by the options assessed is estimated at **74 500**. See the detailed methodological assumptions in Annex C – Section C.5.4.

7.2.2 Option 0 (b) – Definitive Regime

Option 0 (b) is based on the current design for the VAT definitive regime, which entails taxation at the place of destination, and provides the basis for the CBA of options 5 to 7.

Below we present the key characteristics of this option in relation to the analysis of the policy options included in the study. This includes the following:

- VAT gap;
- Administrative burden for businesses (and number of businesses impacted); and
- Administrative burden for public bodies (and number of public bodies impacted).

VAT Gap

With the introduction of the definitive regime, intra-Community transactions are taxed. Though this will not prevent missing trader fraud, a seller will only be able to embezzle VAT on the margin, linked to the core feature of fractionated payments which are at the basis of the VAT system. Therefore a significant decrease of the effect of MTIC fraud is expected from the introduction of the definitive regime

The change from the current to the definitive VAT regime is expected to impact the overall VAT Gap, which is estimated to decrease to EUR 118.6 billion (compared to the EUR 150.2 billion estimated in 2015 – see Section 3.2.2). The MTIC fraud is expected to decrease by 83%, to EUR 3.4 to 8.6 billion, or 2.8% to 8.1% of the total VAT Gap (more details are provided in Section 7.2).

Administrative burden for businesses

Although there are existing studies that estimate the impact of the definitive regime on business costs[129], these are not included in the estimation, as the administrative tasks impacted concern cross-border transactions, while the application of the spit payment mechanism rests essentially on domestic transactions. The assumption has therefore been made that **the administrative burden for businesses in the definitive regime baseline**, for

[129] Implementing the ‘destination principle’ to intra-EU B2B supplies of goods (2015), available: https://ec.europa.eu/taxation_customs/sites/taxation/files/docs/body/ey_study_destination_principle.pdf

the purpose of this study, **does not differ significantly from the baseline in the current regime**.

In addition, while the general characteristics of the VAT definitive regime are known, the details of its framework are not decided yet. A more detailed estimation of its impacts for this study would thus require additional assumptions to be based on uncertain elements of the practical implementation and impacts of the VAT definitive regime.

In the definitive regime, the same number of businesses is assumed to be impacted, since all businesses will be a part of the VAT definitive regime (as no thresholds or exemptions have been considered so far in the design).

Administrative burden for public bodies

Regarding **public bodies**, it is assumed that there would be no VAT-related costs applicable to them in the definitive regime as a starting point.

The number of public bodies in scope of the options assessed is estimated at about **74 500,** the same as under the current VAT regime.

The same restrictive definition of public bodies is used, for consistency reasons.

See the detailed methodological assumptions in Annex C – Section C.5.4.

7.3 Impact on the VAT Gap

One of the key arguments for the split payment mechanism is the need to make the VAT system more robust and fraud-proof and consequently increase revenue collection. As discussed above, the current VAT gap in the EU is estimated for the purposes of this study at EUR 150.2 billion[130]. This loss of revenue for the Government can be accounted for by various factors including missing trader intra-Community (MTIC) fraud, threshold fraud and types of non-compliance such as tax evasion and avoidance.

Introducing a split payment mechanism is expected to reduce the current VAT Gap by limiting certain types of fraud and non-compliance. By introducing direct VAT payments to the tax authority, the supplier will no longer be able to withhold the tax charged to their customer before it reaches the relevant tax authority.

When considering the impact of each option on the VAT Gap the following has been considered:

- **The proportion of the VAT Gap that is attributed to different types of fraud and non-compliance**. For example, the proportion where the failure to pay is due to MTIC fraud or to bankruptcy.
- **The scope of the specific policy option.** For example, whether it applies to B2B transactions only or also to other sales, and the range of payment types covered.

[130] Based on a combination of data collected for the study and Case, 2016: 'Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final Report'

Excluding some payment methods from the scope of the split payment mechanism could incentivise businesses to switch to other payment methods. For example, if split payment is not applicable to cash transactions, businesses may increase the proportion of transactions that are conducted using cash.

- **The effectiveness of split payment in addressing the specific type of fraud or other loss of revenue**. For example, split payment can address failure to pay tax due to bankruptcy through the fact that VAT payments are made at transactional basis, but may not address fraud on cash transactions that are not covered.
- **The possibility of new types of fraud and non-compliance to occur.** To obtain a complete view of the impact, the VAT gap analysis will therefore consider both the potential to reduce existing forms of non-compliance *and* the risk that new forms of non-compliance may emerge.

Based on this information, the proportion of the overall VAT Gap that has been addressed by the specific policy option has been estimated.

The definitions of different fraud types that have been used in the impact analysis are set out in the table below.

Table 11: Types of fraud and non-compliance

Type of fraud or non-compliance	Definition
Missing trader intra-Community (MTIC) fraud	VAT missing trader fraud where fraudsters register for VAT, buy goods VAT free from another EU Member State, sell them on at VAT inclusive prices and then disappear without paying the VAT due to the authorities.
Threshold fraud	Genuine businesses with a turnover above the VAT registration threshold that deliberately do not register for VAT.
Non-compliance (including suppression fraud)	Non-compliance by traders not paying the right amount of VAT at the right time either because of genuine mistakes or where they deliberately understate a portion of their sales or falsely inflate the value of purchases to reduce their VAT liability.
VAT avoidance schemes	If implemented correctly tax avoidance schemes are legal. However, it is not considered acceptable for businesses to use schemes that are artificial and have no other business purpose than to save VAT.
Other components (e.g. repayment fraud, insolvencies)	Repayment fraud – fraudsters register for VAT make false claims for repayments and then abscond. Insolvencies – businesses go bankrupt or become insolvent before paying VAT. Missing trader fraud on customer side – as in the split payment the customer is liable for VAT payment towards the state rather than the supplier, the customer might go missing before accounting for VAT towards the state. Opposite case of Missing trader intra-Community fraud above.

Source: Deloitte descriptions, based on UK National Audit Office 2004 report Tackling VAT fraud[131]

[131] National Audit Office, HM Customs & Excise 'Tackling VAT Fraud', 2004, available here: https://www.nao.org.uk/wp-content/uploads/2004/03/0304357.pdf

The disaggregation of the VAT gap by these types of fraud and non-compliance are necessary to understand the impact of split payment on the VAT gap. However, data at this level of disaggregation is unavailable and has been estimated based on the findings obtained from previous studies on the VAT gap (PwC 2010 and EY 2015). The estimated disaggregation used in the impact analysis is presented in Table 12 below.

The following split of the current VAT gap between different fraud and non-compliance types have been used in the impact analysis:

Table 12: VAT Gap split by different types of fraud and non-compliance

	MTIC fraud	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvency)	Total VAT gap
Proportion of the VAT Gap	23-27%	3-5%	22-37%	22-28%	3-30%	100%
Amount of the VAT gap	EUR 35-41.2 billion	EUR 5.2-6.9 billion	EUR 32.6-55.5 billion	EUR 32.6-41.6 billion	EUR 4.9-44.7 billion	EUR 150.2 billion

Source: Deloitte analysis based on PwC, 2010 study and EY, 2015 study

It should be noted that the sections that follow analyse the potential reduction of the VAT gap based on a reduction in fraud and non-compliance due to the split payment system and does not take into account any new types of fraud that could occur as a result of split payment. In the light of this, the results may overestimate the potential impact.

7.3.1 Option 1 - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)

The estimated aggregate impact of Option 1 on the VAT gap reduction will range between EUR 40.7 billion and EUR 63.2 billion, split between the different fraud types as presented in Table 13 below, followed by the qualitative analysis of the impact. Further information on the methodology and assumptions used in the impact calculation are provided in Annex B – Section B.3.3.

Table 13: Option 1 – Impact on the VAT Gap

	MTIC fraud	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total reduction
VAT Gap reduction	50-70%	0%	30-50%	0-10%	30-50%	27-42%
Amount of VAT gap reduction	EUR 17.5-28.9 billion	EUR 0	EUR 9.8-27.8 billion	EUR 0-4.2 billion	EUR 2.4-13.4 billion	EUR 40.7 - 63.2 billion

Source: Deloitte analysis

Impact on the MTIC fraud

MTIC fraud takes place mostly in a business-to-business context, as the fraud becomes more profitable in such cases, especially when carousel models are used. With an intra-EU supply between businesses being exempted, the fraudulent trader can purchase goods exempt from VAT and re-sell them charging local VAT. With most transactions in a B2B context being EFT-transactions, Option 1 should cover most of the transactions relevant for MTIC fraud and result in a very significant reduction of MTIC fraud. This reduction is caused by the fact that the supplier cannot go missing with the VAT amount, as the customer has accounted for the VAT by paying it directly towards the authorities on transactional basis.

As the split payment scope is limited, it is expected however that some of the fraudsters will shift towards transactions not covered by split payment such as B2C transactions or other payment types (credit cards, cash). Use of B2C transactions is not suitable for carousel fraud. Also, other payment types are harder to use for large amounts and in case of card payments quite traceable. As a consequence, these other types of payment impede the speed of transactions, important to fraudsters with only a limited window of opportunity before 'going missing'.

Option 1 is thus expected to have medium to high level impact, with final reduction in MTIC fraud estimated to be between 50% and 70% or EUR 17.5-28.9 billion.

Impact on the threshold fraud

On threshold fraud, a business can refrain from reporting transactions in order to avoid losing their VAT exempted status, regardless of whether a split payment system applies. Split payment can help to fight fraud within the VAT system, it does not therefore solve the problem of businesses that keep themselves deliberately out of the VAT system.

It is thus estimated that this option will not have any impact on the threshold fraud.

Impact on non-compliance

Regarding non-compliance, the most significant impact of Option 1 is expected to be caused by additional reporting obligations, more specifically the monthly transactional B2B purchases and sales statements. The result will be twofold. The first result is that the heightened quality of data simplifies the fight against different fraud types from the tax authority's perspective. Taxable persons that are intentionally underreporting or misreporting, will be spotted quite easily in a B2B transaction, where both sides submit statements which can be matched.

The second result from the obligation to provide statements follows from the perception of businesses that their actions are scrutinized more than before. As a result, complying businesses will put extra effort in reducing any accidental mistakes and reduce their non-compliance further.

Option 1 is thus expected to have medium level impact on non-compliance (including suppression fraud), with final reduction estimated to be between 30% and 50% or EUR 9.8-27.8 billion.

Impact on VAT avoidance schemes

The search for and implementation of VAT schemes that are more optimal, albeit artificial, from a VAT perspective would become more complex if a split payment and the additional reporting obligations are applied. However, as long as the avoidance schemes do provide extra cash flow or reduce the costs for a business, they will be used up until the point they become unprofitable.

Option 1 impact on VAT avoidance schemes is thus estimated to be very low with a reduction between 0% and 10% or EUR 0 - 4.2 billion.

Impact on other components of VAT gap

Finally, the "other fraud and VAT gap components" category contains input VAT repayment fraud, insolvency, new type of 'missing customer' fraud and any other elements not covered in above.

Input VAT repayment fraud is a purely B2B type of fraud, as only a VAT registered business can request a recovery of VAT. The introduction of transactional statements and matching should reduce requests for repayment of VAT that are based on false invoices (although it would remain possible if both parties are involved and/or other payment methods are used). The tax authority can clearly identify when a supplier has not reported the VAT on a transaction and the customer is trying to recuperate that VAT amount, as the supplier will not have included the transaction in his sales statement. In addition, as VAT is paid over on transactional basis, but VAT refunds asked periodically, the tax authority already holds the cash they would refund and has thus better control over actual refunds. Repayment fraud should therefore be largely reduced.

The risk of insolvency would be reduced, but not fully resolved. More specifically, instead of insolvency of the supplier, the risk moves to the customer side, to situations where a customer wouldn't be able to pay the VAT amount to the tax authority. Given however that the payment of the VAT is transactional and made within the allowed short timeframe after the transaction, the risk of an insolvent customer is generally considered to be lower than an insolvent supplier and in most cases the lack of payment of the VAT as output VAT would be accompanied by a non-deduction of that same VAT as input VAT.

This last reasoning can be applied to shifting MTIC fraud as well. VAT payment liability shifts to the customer and therefore creates a new risk that the customer will not pay VAT towards the tax authorities on their purchase and sells the goods with VAT, for example charging in cash or as a B2C transaction. Therefore in Option 1 it is possible to reverse the roles and become a 'missing customer' instead of a missing supplier. As the opportunities for fraud are clearly reduced given the fact that only B2C/B2G and non-EFT payments are outside the split payment regime, it is expected that only a limited part of missing supplier fraud will shift to become a missing customer fraud. The nominal size of the missing customer fraud will decrease due to the more limited possible types of transactions and disabling of carousel fraud schemes.

Option 1 is therefore in balance expected to have medium level impact on other components of the VAT gap, with final reduction estimated to be between 30% and 50% or EUR 2.4-13.4 billion.

7.3.2 Option 1(b) – Option 1 with blocked VAT account

The scope of the split payment in Option 1(b) is the same as in Option 1, namely applying to domestic B2B EFT transactions. The main difference is the use of blocked VAT bank accounts and keeping the VAT liability with the supplier. Therefore, the main impact of the Option on the VAT gap could be considered largely the same as in Option 1.

As in Option 1, the estimated aggregate impact of Option 1(b) on the VAT gap reduction will range between 40.7 billion and 63.2 billion EUR, split between the different fraud types as presented in Table 14 below, followed by the qualitative analysis of the impact. For further information on the methodology and assumptions used in the impact calculation please see Annex B – Section B.3.3.

Table 14: Option 1(b) – Imapct on VAT Gap

	MTIC fraud	**Threshold fraud**	**Non-compliance**	**VAT avoidance schemes**	**Other components**	**Total reduction**
VAT Gap reduction	50-70%	0%	30-50%	0-10%	30-50%	27-42%
Amount of VAT gap reduction	EUR 17.5-28.9 billion	EUR 0	EUR 9.8-27.8 billion	EUR 0-4.2 billion	EUR 2.4-13.4 billion	EUR 40.7 - 63.2 billion

Source: Deloitte analysis

It is important to note that Option 1(b) is similar to the split payment model analysed in the 2010 study[132].

The 2010 study estimated the aggregate impact of Option 1(b) on the VAT gap reduction as ranging between 45-69%. If applied to the updated VAT gap baseline and the distribution between fraud types as used in this study, the results are the following:

Table 15: Option 1(b) – Imapct on the VAT Gap based on 2010 study

	MTIC	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total reduction
VAT Gap reduction	50-70%	0%-30%	30-70%	30-70%	70-90%	45-69%
Amount of VAT gap reduction based on updated baseline VAT gap	EUR 17.5-28.8 billion	EUR 0-2.1 billion	EUR 9.8-38.8 billion	EUR 9.8-29.1 billion	EUR 4.4-31.3 billion	EUR 68.4-103.2 billion

Source: Deloitte analysis, based on 2010 study

The VAT gap impact analysis carried out in the 2010 study is based on a very similar methodology. The different results can be largely explained by differences in qualitatively assessed levels of impact on fraud and non-compliance types. As the qualitative assessment of impact is based on a theoretical and largely untested model, the results may differ based on whether experts take a more optimistic or conservative approach, even when the arguments are largely aligned, as was the case here.

Impact on the MTIC fraud

As MTIC fraud takes place mostly in a business-to-business context, and with most transactions in a B2B context being EFT-transactions, Option 1(b) should also cover most of the transactions relevant for MTIC fraud and result in a similarly significant reduction of MTIC fraud, especially the carousel fraud. This reduction is caused by the fact that the supplier cannot go missing with the VAT amount, as the customer has accounted for the VAT by paying it in this Option directly towards the blocked VAT bank account of the supplier.

As is the case in Option 1, the limited scope would still enable some of the fraudsters will shift towards transactions not covered by split payment such as B2C transactions or other payment types (credit cards, cash).

132 PricewaterhouseCooper (2010), Ibid.

Option 1(b) is thus expected to have medium to high level impact, with final reduction in MTIC fraud estimated to be between 50% and 70% or EUR 17.5-28.9 billion.

Impact on the threshold fraud

As on Option 1, split payment (notwithstanding the scope) can help to fight fraud within the VAT system, but does not solve the problem of businesses that keep themselves deliberately out of the VAT system, as is the case in threshold fraud.

It is thus estimated that this option will not have any impact on the threshold fraud.

Impact on non-compliance

Unlike Option 1, no additional reporting obligations have been added in Option 1(b), as the VAT liability will remain on the supplier, who just needs to instruct the customer to pay VAT to his blocked VAT account. The benefits expected from transaction matching would therefore not be present under this option.

Use of blocked VAT bank accounts would however give tax authorities a good overview of payment flows, which could significantly improve the compliance levels.

As the customer has no VAT liability, the effectiveness of the measure may depend also on the level of compliance on the customer side to pay the VAT to the blocked account rather than as a single payment directly to the supplier. A mechanism is required enabling the supplier to correct such situations, e.g. by enabling the supplier to make additional payments to its own blocked VAT account, transferring the VAT that has been incorrectly paid to its regular bank account. Provided such option exists, the overall non-compliance level may not deteriorate.

Option 1(b) is thus expected to have medium level impact on non-compliance (including suppression fraud), with final reduction estimated to be between 30% and 50% or EUR 9.8-27.8 billion.

Impact on VAT avoidance schemes

Use of split payment and blocked VAT accounts will make the use of avoidance schemes more difficult and costly. However, as in Option 1, as long as the schemes provide extra cash flow or reduce the costs for a business, they will be used up until the point they become unprofitable. The impact on VAT avoidance schemes is thus estimated to be very low, between 0% and 10% or EUR 0 - 4 billion.

Impact on other components of VAT gap

The impact of Option 1(b) on input VAT repayment fraud, which is a purely B2B type of fraud, would be reduced by this option as in Option 1, as tax authority has more visibility and control over the VAT payments and funds. However, the effectiveness may also depend on whether the VAT refund payments would be made to the blocked account or to the regular account. Using just the blocked account for all VAT payments, including refunds from government, would ensure that no VAT funds could be embezzled. At the same time it would not work for businesses who are regularly in a refund position, due to the nature of their trade, e.g. exporters, so special arrangements would be required for such situations.

The risk of insolvency would be reduced as in Option 1, mainly due to limited access to VAT funds and transactional VAT payments to the blocked account by the customer.

As in Option 1, there is a risk that the customer will not make the split VAT payment. However, as the liability in this Option still lies with the supplier, it would not cause a fraud shift and revenue loss for the tax authority, although it would increase the burdens of the supplier who needs to monitor separately the receipt of VAT payments.

Shifting of fraud to B2C models and rise of new types of fraud is still possible. For example, the risk of new X-type fraud scheme as was used in Bulgaria[133], may appear in case of this Option. However, it is difficult to estimate the extent of such fraud schemes.

As the overall opportunities for fraud are clearly reduced given the fact that only B2C/B2G and non-EFT payments are outside the split payment regime, it is expected that only a limited part will shift to new types of fraud.

Option 1(b) is therefore also expected in balance to have medium level impact on other components of VAT gap, with final reduction estimated to be between 30% and 50% or EUR 2.4-13.4 billion.

7.3.3 Option 2 – Option 1 combined with a generalised reverse charge mechanism in certain Member States

The scope of this study does not cover the impact assessment of the GRCM. However, the Commission has studied its potential impact in the impact assessment accompanying the legislative proposal on the GRCM[134].

Given that by the design of Option 2, the GRCM and the Split Payment mechanism would be mutually exclusive, there would be no direct interaction between the two systems. Therefore the impact of the Split Payment mechanism in Option 2, would be the same as in Option 1, but limited to the Member States applying the split payment system instead of the GRCM.

For the purposes of the study, more specifically for estimating the difference in total reduction of VAT Gap in Member States applying split payment, an assumption was made that two Member States (Austria and Czech Republic) would apply the GRCM. The impact on the VAT gap would differ if the GRCM is applied by a different selection of Member States (see Annex B – Section B.3.2. for more details).

The resulting estimated aggregate impact of Option 2 on the VAT gap reduction in the Member States applying the split payment would be similar as in Option 1 and will range between 39.3 billion and 61.1 billion EUR, split between the different fraud types as presented

[133] See Section 4.3.2.
[134] See: https://ec.europa.eu/taxation_customs/sites/taxation/files/swd_2016_457_en.pdf

in Table 16 below. In the Member States that apply GRCM, a reduction of the VAT gap is also expected to result from the GRCM, however this result is not included under this option.

For further information on the methodology and assumptions used in the impact calculation please see Annex B – Section B.3.3).

Table 16: Option 2 – Impact on the VAT Gap

	MTIC fraud	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total reduction
VAT Gap reduction	50-70%	0%	30-50%	0-10%	30-50%	27-42%
Amount of VAT gap reduction	EUR 16.9-27.9 billion	EUR 0	EUR 9.5-26.8 billion	EUR 0-4 billion	EUR 2.3-13 billion	EUR 39.3 – 61.1 billion

Source: Deloitte analysis

7.3.4 Option 3 – Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)

The estimated aggregate impact of Option 3 on the VAT gap reduction will range between 54.7 billion and 70 billion EUR, split between the different fraud types as presented in *Table 17*: Option 3 – Impact on the VAT Gap below, followed by the qualitative analysis of the impact. For further information on the methodology and assumptions used in the impact calculation please see Annex B – Section B.3.3.

Table 17: Option 3 – Impact on the VAT Gap

	MTIC fraud	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total reduction
VAT Gap reduction	70-90%	0%	30-50%	0-10%	50-70%	38-48%
Amount of VAT gap reduction	EUR 23.7-35.9 billion	EUR 0	EUR 9.5-26.8 billion	EUR 0-4 billion	EUR 3.3-21.6 billion	EUR 54.7 - 70 billion

Source: Deloitte analysis

Impact on the MTIC fraud

Option 3 is expected to result in a significant reduction of MTIC fraud, but due to its scope limitation to EFT payments would still enable fraud shifts to transactions not covered by split payment. As Option 3 expands the split payment to B2C and B2G transactions, the reduction in fraud is estimated to be higher than in Options 1 and 2. Important to note however, that with B2C transactions the supplier is still collecting the VAT and is only obliged to account for VAT once a day. This model reduces significantly the opportunity window, but does not remove it in full.

Despite the extension to B2C and B2G, the MTIC fraud may still shift to other payment types such as credit cards and cash. However these payment types are impractical for large amounts and in case of card payments more traceable. As a consequence these types of payment impede the speed of transactions, important to fraudsters with only a limited window of opportunity before 'going missing'.

The Option 3 is therefore expected to have high impact on MTIC fraud with final reduction estimated to be between 70% and 90% or EUR 23.7 - 35.9 billion .

Impact on the threshold fraud

As on Option 1, split payment (notwithstanding the scope) can help to fight fraud within the VAT system, but does not solve the problem of businesses that keep themselves deliberately out of the VAT system, as is the case in threshold fraud.

It is thus estimated that this option will not have any impact on the threshold fraud.

Impact on non-compliance

In addition to the impact described under Option 1, Option 3 requires also public bodies to file transactional purchase statements, resulting in less possibilities for fraudulent suppliers to under- or misreport. Since transactional statements are not submitted on B2C supplies or purchases, there is less transparency on B2C transactions.

Important to note is that inclusion of B2C supplies will bring into the scope more micro-businesses (in retail or B2C service sectors) for whom the extra administrative burden of daily VAT accounting and payments (currently often done monthly by an outsourced accountant) on top of split payments with transactional VAT payment on their B2B purchases and supplies, might be very complex. Introducing such significant administrative burdens might therefore lead to an increase of non-compliance amongst the smallest businesses.

Although non-compliance is expected to increase amongst micro-businesses, unless additional measures are added to address these, in monetary terms the positive impact from inclusion of B2G supplies is expected to exceed the negative impact from B2C expansion.

With more complex obligations to be met, the risk of unintentional errors would also increase.

Option 3 is therefore expected to have medium impact on non-compliance with the final reduction estimated to be between 30% and 50% or EUR 9.5-26.8 billion.

Impact on VAT avoidance schemes

As in Option 1, despite added transparency, as long as the schemes provide extra cash flow or reduce the costs for a business, they will be used up until the point they become unprofitable. The impact on VAT avoidance schemes is thus estimated to be very low, between 0% and 10% or EUR 0 - 4 billion.

Impact on other components of VAT gap

Regarding Option 3 impact on other components of VAT gap, there are two main impacts to consider on insolvency. Firstly, the inclusion of B2C transactions results in VAT being paid to the tax authorities daily. A daily payment should in principle reduce the possibility of insolvent (B2C) suppliers.

Secondly, as in Option 1 on B2B split payment, in B2G supplies it may happen that a customer would not be able to pay the VAT amount to the tax authority. Given however that the payment of VAT is transactional and done within the brief allowed timeframe after the transaction, the risk of an insolvent purchaser is generally considered to be lower than an insolvent seller. This is certainly the case when the customer is a public body.

As in Option 1, in option 3 it is also possible that fraud will continue to shift to a 'missing customer' fraud, although this is less likely in case of B2G supplies and for B2C supplies is not relevant as the supplier collects the VAT.

The overall Option 3 impact on other categories of fraud is thus estimated to be medium to high, resulting in reduction between 50% and 70% or EUR 3.3-21.6 billion.

7.3.5 Option 4 – Option 3 with extension of split payment to credit card and cash payments

The estimated aggregate impact of Option 4 on the VAT gap reduction will range between EUR 61 billion and EUR 80.7 billion , split between the different fraud types as presented in Table 18 below, followed by the qualitative analysis of the impact. For further information on the methodology and assumptions used in the impact calculation please see Annex B – Section B.3.3.

Table 18 : Option 4 - Impact on the VAT Gap

	MTIC fraud	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total reduction
VAT Gap reduction	70-90%	0%	50-70%	0-10%	50-70%	42-56%
Amount of VAT gap reduction	EUR 23.7-35.9 billion	EUR 0	EUR 15.8-37.5 billion	EUR 0-4 billion	EUR 3.3-21.6 billion	EUR 61 – 80.7 billion

Source: Deloitte analysis

Impact on the MTIC fraud

As in Option 4 all transaction types as well as payment solutions are included in the split payment, the reduction in fraud is estimated to be higher in comparison to earlier options. As above, important to note however, that on B2C transactions and cash the supplier is still collecting the VAT and is only obliged to account for VAT once a day. This Option reduces thus significantly the opportunity window, but does not remove it in full.

The resulting reduction in MTIC fraud is therefore estimated to be on the higher end of the 70% to 90% fraud reduction range (compared to Option 3) or EUR 23.7 - 35.9 billion.

Impact on the threshold fraud

As on other options above, split payment (notwithstanding the scope) can help to fight fraud within the VAT system, but does not solve the problem of businesses that keep themselves deliberately out of the VAT system, as is the case in threshold fraud.

It is thus estimated that this option will not have any impact on the threshold fraud.

Impact on non-compliance

Option 4 contains transactional reporting on all B2B and B2G supplies (including payments with credit card), which is expected to increase the impact on non-compliance. As above, increasing the administrative burden is expected to also increase non-compliance as well as number of errors, especially amongst microbusinesses, however on monetary terms this negative impact is expected to be significantly smaller than the positive impact of the rest.

The final reduction in non-compliance fraud is thus estimated to be between 50% and 70% or EUR 15.8 - 37.5 billion.

Impact on VAT avoidance schemes

As on other options, despite added transparency, as long as the schemes provide extra cash flow or reduce the costs for a business, they will be used up until the point they become unprofitable. The impact on VAT avoidance schemes is thus estimated to be still very low, between 0% and 10% or EUR 0-4 billion.

Impact on other components of VAT gap

In addition to the impact described in previous options, given that other payment forms are also included in Option 4, the fraud reduction is expected to be higher than in option 3, as more fraud shifts are prevented.

Option 4 impact on other components of VAT gap is thus expected to be medium to high, resulting in reduction between 50% and 70% or EUR 3.3 - 21.6 billion.

7.3.6 Option 5 – Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)

With the introduction of the definitive regime, intra-Community transactions are taxed. Though this will not prevent missing trader fraud, a seller will only be able to embezzle VAT on the margin, the core idea when the VAT system was set up. Therefore a significant decrease of MTIC fraud is expected from the introduction of the definitive regime. Under the definitive VAT regime, it is also expected that no GRCM would exist anymore on national level.

The change from the current to the definitive regime has been taken into account in our modelling, by reducing the MTIC fraud by 83% and the total VAT gap by EUR 29-34.2 billion. The resulting definitive regime VAT gap and its split between the different fraud types is presented below:

Table 19: Definitive regime: VAT Gap split by different types of fraud and non-compliance

	MTIC fraud	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total VAT gap
Proportion of the VAT Gap	2.8-8.1%	4.4-5.9%	27.5-46-8%	27.5-35.1%	4.1-37.7%	100%
Amount of the VAT gap	EUR 3.3-9.6 billion	EUR 5.2-6.9 billion	EUR 32.6-55.5 billion	EUR 32.6-41.6 billion	EUR 4.9-44.7 billion	EUR 118.6 billion

Source: Deloitte analysis, based on 2015 study

Regarding Option 5 impact on VAT gap, the estimated aggregate impact of Option 5 on the further VAT gap reduction will range between EUR 15.3 billion and EUR 38.2 billion, split between the different fraud types as presented in Table 20 below, followed by the qualitative analysis of the impact. For further information on the methodology and assumptions used in the impact calculation please see Annex B – Section B.3.3.

Table 20: Option 5 – Impact on the VAT Gap

	MTIC fraud	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total reduction
VAT Gap reduction	30-50%	0%	30-50%	0-10%	10-30%	13-32%
Amount of VAT gap reduction	EUR 1-4.8 billion	EUR 0	EUR 9.8-27.8 billion	EUR 0-4.2 billion	EUR 1.5-4.5 billion	EUR 15.3 – 38.2 billion

Source: Deloitte analysis

Impact on the MTIC fraud

Although a significant decrease of MTIC fraud is expected from the introduction of the definitive regime, it is clear that MTIC fraud might still continue to exist. Firstly a supplier would still control the VAT over the margin. Secondly, a large amount of transactions would be taxed by application of reverse charge (similarly to the existing exemption), rather than VAT charged by the supplier, as the Certified Taxable Person (CTP) concept is expected to be applied widely (70-95% of businesses may have CTP status – explained in more detail in section 7.4.6). Because a CTP business would have to be certified by the tax authority (as a compliant and trustworthy business), the risk of MTIC fraud carried out by CTPs is expected to be low. However, it will depend on the effectiveness of the criteria and the process of achieving the CTP-status.

A Split Payment mechanism introduced in Option 5 would further reduce missing trader fraud and more specifically the fraud where a supplier would 'go missing' with the VAT on his margin. This type of missing trader fraud is prevented in a B2B situation as the supplier would not collect any VAT. However, B2C and B2G transactions are not included in this option, which enables some businesses to still collect VAT on part of their turnover. The same applies to non-EFT payment types.

Option 5 is therefore expected to have medium impact on the further reduction of MTIC fraud, estimated to be between 30% and 50% or EUR 1 – 4.8 billion.

Impact on the threshold fraud

On threshold fraud, the impact would not change and stay the same as in earlier options.

This option is thus estimated to have no impact on the threshold fraud.

Impact on non-compliance

Regarding non-compliance, as on other options, the most significant impact will come from additional reporting obligations, more specifically the monthly transactional purchase and sales statements, which increase transparency for tax authorities. More transparency makes businesses feel that their actions are scrutinized more than before. As a result, compliant businesses will make extra effort in reducing errors.

The option is thus expected to have medium impact and result in an estimated reduction of non-compliance between 30% and 50% or EUR 9.8 – 27.8 billion.

Impact on VAT avoidance schemes

As on other options, the Option 5 reduction of VAT avoidance schemes is estimated to be very low, between 0% and 10% or EUR 0 – 4.2 billion.

Impact on other components of VAT gap

The impact of Option 5 on other components of the VAT gap is similar to the impact of Option 1, which applies split payment to the same scope, namely B2B EFT transactions.

So the option is expected to largely reduce VAT repayment fraud due to transactional statements and the fact that the refundable VAT is already largely in the hands of the tax authority (rather than being offset against output VAT on VAT return).

The risk of insolvency would be reduced, but not fully resolved, as it may partly move to the customer side, but be reduced by transactional VAT payments.

The risk of missing trader fraud shifting to missing customer fraud will remain, especially on domestic transactions with non-CTP businesses. Considering that the overall VAT gap in the definitive regime is lower, this shift of fraud will influence the overall impact of Option 6 on other components of the VAT gap (i.e. the further reduction of the VAT gap from the new baseline) despite the fact that carousel fraud schemes would be stopped.

Option 5 is therefore in balance expected to have low impact on further reduction of other components of the VAT gap, with the reduction estimated to be between 10% and 30% or EUR 1.5 – 4.5 billion.

7.3.7 Option 6 – Option 5 with extension of split payment on EFT to B2C and B2G

The estimated aggregate impact of Option 6 on the definitive regime VAT gap reduction will range between 24.9 billion and 41.1 billion EUR, split between the different fraud types as presented Table 21 below, followed by the qualitative analysis of the impact. For further information on the methodology and assumptions used in the impact calculation please see Annex B – Section B.3.3.

Table 21: Option 6 – Impact on the VAT Gap

	MTIC fraud	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total reduction
VAT Gap reduction	50-70%	0%	30-50%	0-10%	30-50%	21-35%
Amount of VAT gap reduction	EUR 1.7-6.7 billion	EUR 0	EUR 9.8-27.8 billion	EUR 0-4.2 billion	EUR 2.4-13.4 billion	EUR 24.9 – 41.1 billion

Source: Deloitte analysis

Impact on the MTIC fraud

In Option 6, similarly to Option 3, B2C and B2G transactions are added to the scope of the split payment mechanism, which reduces the ability of some businesses to collect the VAT on part of their turnover and therefore reduces further the missing trader type fraud. However all non-EFT payment types remain under the normal regime, therefore not all MTIC fraud would be addressed.

Unlike in Option 3, split payment would also be applied to intra-EU B2G supplies. However, this is unlikely to have much impact on the reduction of MTIC fraud, as it is not likely that public bodies could be currently involved in MTIC fraud in a 'missing trader' position.

The Option 6 impact on further reduction in MTIC fraud is thus estimated to be medium to high, ranging between 50% and 70% or EUR 1.7 – 6.7 billion.

Impact on the threshold fraud

On threshold fraud, the impact would not change and stay the same as in earlier options.

This options is thus estimated to have no impact on the threshold fraud.

Impact on non-compliance

As in Option 3, Option 6 requires also public bodies to file transactional purchase statements, resulting in less possibilities for fraudulent suppliers to under- or misreport. Since transactional statements are not submitted on B2C supplies or purchases, there is less transparency on B2C transactions.

With more burdensome and complex obligations to be met on B2C supplies, the non-compliance and risk of unintentional errors are expected to increase, especially amongst the smallest businesses. However, in monetary terms the positive impact from inclusion of B2G supplies is expected to exceed the negative impact from B2C expansion.

Option 6 is therefore expected to have medium impact on non-compliance with the final reduction estimated to be between 30% and 50% or EUR 9.8 - 27.8 billion.

Impact on VAT avoidance schemes

As on other options, the Option 6 reduction of VAT avoidance schemes is estimated to be very low, between 0% and 10% or EUR 0 – 4.2 billion.

Impact on other components of VAT gap

The impact of Option 6 on the reduction of other components of the VAT gap is very similar to Option 3. Therefore, regarding VAT repayment fraud no further impact is expected in Option 6 from the extension to B2G and B2C transactions, as it takes place mainly just in B2B context.

Insolvency related risks are expected to reduce further, as the B2G extension and daily VAT payments on B2C reduce risks of VAT losses from supplier insolvency.

The risk of fraud shifting to become a 'missing customer' fraud on B2B transactions is the same as in Option 5, with no significant further reduction expected, as unlikely to apply to B2G transactions and not possible on B2C.

Option 6 is expected to have in balance medium impact on the reduction in other elements of the VAT gap, ranging between 30% and 50% or EUR 2.4 - 13.4 billion.

7.3.8 Option 7 - Option 6 with extension of split payment to credit card and cash payments

The estimated aggregate impact of Option 7 on the VAT gap reduction will range between EUR 31.4 billion and 52.2 billion, split between the different fraud types as presented in Table 22 below, followed by the qualitative analysis of the impact. For further information on the methodology and assumptions used in the impact calculation please see Annex B – Section B.3.3.

Table 22: Option 7 – Impact on the VAT Gap

	MTIC fraud	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total reduction
VAT Gap reduction	50-70%	0%	50-70%	0-10%	30-50%	27-44%
Amount of VAT gap reduction	EUR 1.7-6.7 billion	EUR 0	EUR 16.3-38.9 billion	EUR 0-4.2 billion	EUR 2.4-13.4 billion	EUR 31.4 - 52.2 billion

Source: Deloitte analysis

Impact on the MTIC fraud

Regarding the impact on MTIC fraud, with all types of transactions and payments included, fraud shifting risks would be reduced to the lowest possible level. However given the fact that on B2C transactions the supplier still collects the VAT, even Option 7 cannot fully prevent any missing trader fraud.

The Option 7 impact on further reduction in MTIC fraud is thus estimated to be on the higher end of medium to high, ranging between 50% and 70% or EUR 1.7 – 6.7 billion.

Impact on the threshold fraud

On threshold fraud, the impact would not change and stay the same as in earlier options.

This option is thus estimated to have no impact on the threshold fraud.

Impact on non-compliance

As in Option 4, Option 7 contains transactional reporting on all B2B and B2G supplies (including payments with credit card), which is expected to increase the impact on non-compliance. As above, increasing administrative burden is expected to also increase non-compliance as well as the number of errors, especially amongst microbusinesses. However in monetary terms this negative impact is expected to be significantly smaller than the positive impact of the rest.

The final reduction in non-compliance fraud is thus estimated to be between 50% and 70% or EUR 16.3 – 38.8 billion.

Impact on VAT avoidance schemes

As on other options, the Option 7 reduction of VAT avoidance schemes is estimated to be very low, between 0% and 10% or EUR 0 – 4.2 billion.

Impact on other components of VAT gap

As in Option 4, given that other payment forms are also included in Option 7, the fraud reduction is expected to be higher than in option 6, as more fraud shifts are prevented.

The impact of Option 7 on other components of the VAT gap is thus expected to be medium (but higher than in Option 6), resulting in a reduction between 30% and 50% or EUR 2.4 – 13.4 billion.

7.3.9 Overview of impacts on the VAT Gap

The comparative impact of the different policy options to the VAT gap and its different components is presented below.

Table 23: VAT Gap reduction of policy options

Policy Option	MTIC fraud	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total reduction
Policy options based on current VAT regime						
Option 1	50-70%	0%	30-50%	0-10%	30-50%	27-42%
	EUR 17.5-28.9 billion	EUR 0	EUR 9.8-27.8 billion	EUR 0-4.2 billion	EUR 2.4-13.4 billion	EUR 40.7 - 63.2 billion
Option 1(b)	50-70%	0%	30-50%	0-10%	30-50%	27-42%
	EUR 17.5-28.9 billion	EUR 0	EUR 9.8-27.8 billion	EUR 0-4.2 billion	EUR 2.4-13.4 billion	EUR 40.7 - 63.2 billion
Option 2	50-70%	0%	30-50%	0-10%	30-50%	27-42%
	EUR 16.9-27.9 billion	EUR 0	EUR 9.5-26.8 billion	EUR 0-4 billion	EUR 2.3-13 billion	EUR 39.3 - 61 billion
Option 3	70-90%	0%	30-50%	0-10%	50-70%	38-48%
	EUR 23.7-35.9 billion	EUR 0	EUR 9.5-26.8 billion	EUR 0-4 billion	EUR 3.3-21.6 billion	EUR 54.7 - 70 billion
Option 4	70-90%	0%	50-70%	0-10%	50-70%	42-56%
	EUR 23.7-35.9 billion	EUR 0	EUR 15.8-37.8 billion	EUR 0-4 billion	EUR 3.3-21.6 billion	EUR 61 – 80.7 billion

Policy Option	MTIC fraud	Threshold fraud	Non-compliance	VAT avoidance schemes	Other components	Total reduction
Policy options based on definitive VAT regime						
Option 5	30-50%	0%	30-50%	0-10%	10-30%	13-32%
	EUR 1-4.8 billion	EUR 0	EUR 9.8-27.8 billion	EUR 0-4.2 billion	EUR 1.5-4.5 billion	EUR 15.3 – 38.2 billion
Option 6	50-70%	0%	30-50%	0-10%	30-50%	21-35%
	EUR 1.7-6.7 billion	EUR 0	EUR 9.8-27.8 billion	EUR 0-4.2 billion	EUR 2.4-13.4 billion	EUR 24.9 – 41.1 billion
Option 7	50-70%	0%	50-70%	0-10%	30-50%	27-44%
	EUR 1.7-6.7 billion	EUR 0	EUR 16.3-38.9 billion	EUR 0-4.2 billion	EUR 2.4-13.4 billion	EUR 31.4 - 52.2 billion

Source: Deloitte analysis

Based on the above analysis, the following conclusions can be drawn regarding the impact of the policy options on the reduction of the VAT gap:

- Split payment has a potential to **significantly reduce MTIC fraud** by collecting VAT directly from customers on a transactional basis.
- As MTIC fraud takes place mostly in B2B EFT transactions, **Option 1** should cover most of the transactions relevant to MTIC fraud, especially blocking the carousel fraud. However, some fraud may shift to transactions not covered by split payment, such as B2C or non-EFT. Some fraud may also shift from missing supplier to missing customer fraud.
- Split payment would reduce also **non-compliance**, as new reporting requirements and transactional VAT payments increase transparency (except in Option 1(b), where transactional reports are not used), so tax authorities would be better informed and businesses would feel more scrutinised.
- Split payment has also potential to reduce significantly **VAT repayment fraud** and VAT losses due to **insolvent suppliers**, which would be already addressed by Option 1 as it can only be committed by VAT registered businesses.
- Split payment is likely to have no or low impact on VAT avoidance schemes and threshold fraud, which need different types of measures.

With regard to the expected impacts of the other individual policy options, the following results should be highlighted:

- **Option 1(b)** with blocked VAT account has a similar impact on the VAT gap as Option 1 as their scope is the same. However, as the liability to pay the VAT remains with the supplier, there is no risk of revenue loss from missing customer fraud. The blocked VAT account would entail a higher burden on the supplier resulting from the need to control VAT payments from his customers.

- **Option 2** is considered to have the same impact on the VAT gap as Option 1, as the study does not assess the impact of the GRCM and no cross border risks were identified due to the lack of interaction between two systems.
- **Option 3** widens the split payment to B2G and B2C transactions and has therefore an overall higher impact on MTIC fraud and reduced risks of fraud shifts. The main downside is the potential increase in non-compliance amongst smaller businesses in B2C trade, whose administrative burden would be significantly increased.
- **Option 4** applies split payment to the widest scope and is therefore expected to have the highest impact on the reduction of MTIC fraud and other elements of the VAT gap.
- **Options 5-7** apply split payment in the definitive VAT regime. Implementation of the definitive VAT regime is expected to reduce MTIC fraud by 83%., therefore reducing the potential impact of the split payment mechanism on this element of the VAT Gap in absolute terms. Split payment has the potential to reduce the fraud risks further, mostly because it would apply also to domestic transactions. The relative impact on the VAT gap would be very similar to the Options 1, 3 and 4, thus increasing by the expansion of the scope to a wider range of transactions.

7.4 Impact on cash flow

As a result of the switch to a split payment mechanism, businesses will not collect output VAT from their customers and will therefore see a worsening of their cash flow position. These impacts are exacerbated the longer the delay in obtaining VAT refunds (when in credit position). In contrast to businesses, each tax authority will benefit from earlier tax payments from transactions subject to split payment, improving its cash flow position.

The cash flow implications that occur under each of the policy options for both businesses and tax authorities are considered in more detail below.

Cash flow impact for businesses

Under the baseline, it is assumed that interest can be earned on a business' temporarily positive cash balance arising from VAT receipts and payments. Conversely, in the case of a negative balance arising from the introduction of a split payment mechanism, businesses are assumed to borrow additional funds to cover this amount (or to retain sufficient cash to cover this cost, foregoing other investment opportunities and the associated benefits). The cash flow impact on businesses of switching to a split payment system is calculated as the interest paid under the split payment system, plus the interest received under the current system.

The interest rate at which businesses can borrow is informed by the ECB's MFI interest rates for loans to non-financial corporations[135], data from other central banks and survey responses. The interest rates used for each Member State can be found in Annex F - Table

135 https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/bank_interest_rates/mfi_interest_rates/html/index.en.html

132. It should be noted that the interest rates used are nominal rates and thus have been adjusted to reflect the effect of inflation.

For each policy option the study estimates the cash flow implications on businesses for the following:

- The cash flow impact by each Member State; and
- The cash flow impact on the average business.

Before proceeding to the estimations it is important to consider first, why any differences between the cash flow impact for each Member State and the average business may occur.

The cash flow impact by each Member State

Any differences observed across Member States are impacted by several factors:

- the level of Gross and Net VAT subject to split payment within the Member State;
- the VAT return and refund period within the Member State, including the average delay of a refund after it has been requested; and
- the cost of finance within the Member State i.e. the interest rate.

For example the longer the refund period or the higher the interest rate within a specific Member State the larger the impact. Similarly, the larger the share of B2B EFT transactions in turn means the larger the proportion of VAT revenues impacted by Option 1 and hence the larger the overall impact.

The cash flow impact on the average business

When looking at the average business impact it is important to acknowledge that only certain businesses will be affected and to different degrees. The results shown are for an average business based on business turnover and VAT paid in different business size brackets at the EU level. The analysis also provides estimates for the average business within each Member State. There are no estimates provided for the average business impact within different business sizes within each Member State due to issues with reliability of output VAT and business turnover data at that level of granularity.

It is also key to understand that the implications of the introduction of a split payment mechanism on the VAT position of a business (i.e. whether they will have to pay VAT or receive a refund) will greatly depend on the specific circumstances and hence could vary significantly from one business to another. Elements to consider when looking at a specific business would be, for example:

- a business only purchasing and selling services cross-border would not suffer any consequences from the introduction of a split payment under options 1-4;
- a business solely purchasing services and goods cross-border (subject to reverse charge) and only selling domestically (when subject to split payment), will see its working capital reduced (negative impact on cash flow), since it will no longer receive VAT from domestic sales;
- a business only purchasing domestically and selling cross-border, will not see its working capital (cash flow) impacted, under options 1-4;

- a business both buying and selling domestically, will no longer be able to use output VAT to compensate for the input VAT paid under a split payment mechanism, and thus see a negative impact on cash flow.

Given the above, this part of the analysis considers how, for the average business, the impact may vary across different business sizes. Taking into account the average turnover within each business size bracket and VAT paid, the estimated impact on the average business can be calculated.

Cash flow impact for tax authorities

In contrast to businesses, the cash flow impact for national tax authorities is likely to be positive. Through a split payment mechanism VAT is collected faster compared to the current regime, which in turn has a positive impact on cash flows. Similarly to businesses, the tax authority is assumed to earn an interest rate on positive cash balances. In addition, the introduction of a split payment mechanism is likely to aid in reducing the VAT Gap. This additional cash flow also leads to additional interest income. The cash flow benefit to tax authorities is calculated as the difference between interest earned under the split payment system and the interest earned under the current system and is expressed as the difference in financial costs for the tax authorities.

The interest rate that is applied to tax authorities' cash holdings is obtained from the ECB's interest rate statistics for EU Member States[136]. These sovereign bond yields reflect the cost at which Member States can borrow funds. Cash balances arising from VAT collection allow a government to borrow less, resulting in lower public interest expenditure. The reduction of this expenditure is analogous to a positive cash flow impact.

For each of the policy options considered the cash flow implications estimated for each Member State's tax authority are impacted by several factors:

- the level of Gross and Net VAT subject to split payment within the Member State;
- the VAT return and refund period within the Member State, including the average delay of a refund after it has been requested; and
- the cost of government borrowing i.e. the interest rate.

For example, as with the impact on businesses the longer the refund period or the larger the interest rate within a specific Member State the larger the impact. Similarly, a larger share of VAT revenues impacted by each option will result in a larger overall impact.

Sensitivity analysis on interest rates

It is also recognised that interest rates and ease of accessing finance will vary by business size. In particular, across the EU some SMEs will see difficulty in accessing finance and as such will see higher interest rates. In addition it is also possible that over time interest rates will, on average, increase. Therefore, for the aggregate cash flow impact at the EU level, some

[136] See: https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/long_term_interest_rates/html/index.en.html

sensitivity analysis around possible increases on the average interest rate within each Member State has been carried out. The sensitivity analysis is based on a range of increases to the average interest rates between 0.5% and 2%.

As with the cash flow impact on businesses, some sensitivity analysis around possible increases to the average interest rate applicable to Governments within each Member State has been carried out. The sensitivity analysis is again based on a range of increases in interest rates between 0.5% and 2%.

Further information and details on the sensitivity analysis on interest rates are provided in Annex E – Section E.2.

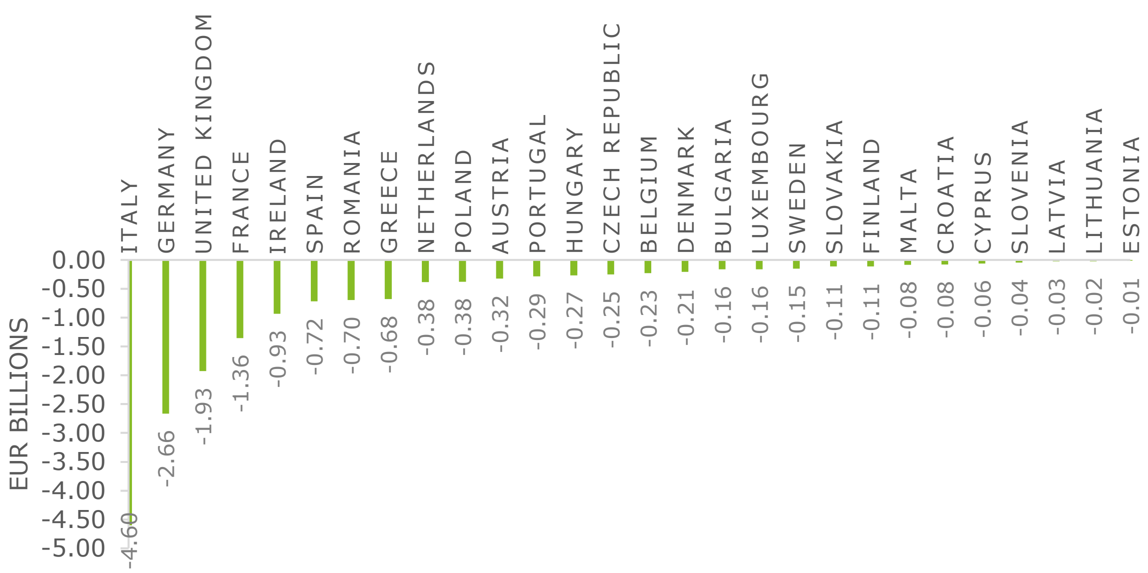
7.4.1 Option 1 - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)

Cash flow impact for businesses

Cash flow Impact by Member State

The introduction of a split payment mechanism on B2B EFT transactions is estimated to result in **a yearly financing cost of EUR 16.93 billion to affected businesses across the EU**. This is a direct result of a worsening of cash flows. The graph below shows the aggregate impact at the Member State level.

Figure 11: Option 1 - Aggregate cash flow impact for businesses

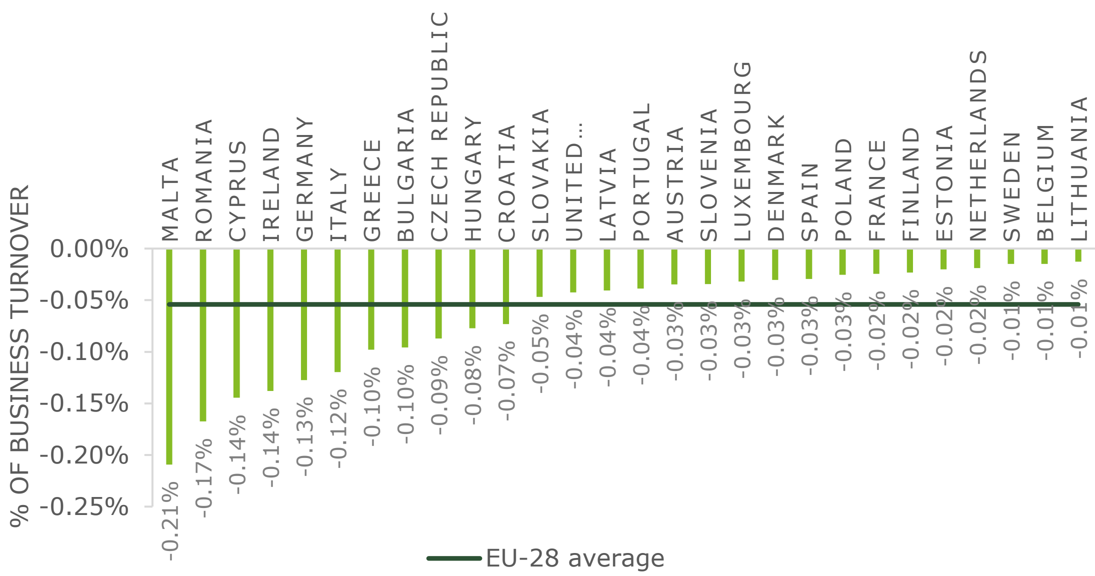


Source: Deloitte analysis

Italy, Germany, UK and France see the largest impacts in absolute terms with a financing cost to businesses of EUR 4.60 billion, EUR 2.66 billion, EUR 1.93 billion and EUR 1.36 billion per year respectively. The smallest impacts are seen within Estonia, Lithuania and Latvia with EUR 0.01 billion, EUR 0.02 billion and EUR 0.03 billion respectively.

This average impact can also vary considerably when viewed at the Member State level. The graph below shows the estimated impact of the average business within each Member State.

Figure 12: Option 1 – Average cash flow impact by Member State



Source: Deloitte analysis

When the impact is analysed as a **percentage of business turnover**, Malta and Romania are estimated to have an impact more than three times the EU average, with an additional financing cost due to a negative impact on their cash flows of -0.21% and -0.17% of turnover respectively. In addition, Cyprus, Ireland, Germany, Italy, Greece, Bulgaria and Greece all would see an impact of at least twice the EU average.

As stated above, the differences observed across Member states are impacted by several factors:

- the level of Gross and Net VAT subject to split payment within the Member State;
- the VAT return and refund period within the Member State, including the average delay of a refund after it has been requested; and
- the cost of finance within the Member State i.e. the interest rate.

For example, although Romania has VAT return and refund periods on a monthly basis, the average interest rate within the country is 8% for businesses. In contrast, while Malta's interest rate is 5%, the refund process within the Member State is considerably slower, with the average business not receiving a refund of VAT for 150 days after it has been requested. As such there is a greater impact on the average business in these two countries compared to other Member States.

Cash flow impact by business size

The majority of this impact is felt by **the largest businesses in the EU**[137] with an aggregate yearly financing cost of EUR 13.77 billion (or over 80% of the total financing cost). The table below shows the aggregate impact by different business sizes within the EU.

Table 24: Option 1 – EU-28 cash flow impact by business size

Turnover brackets	Less than EUR 50 000	EUR 50 000 to 100 000	EUR 100 000 to 500 000	EUR 500 000 to 2 000 000	More than EUR 2 000 000
EUR billions	-0.33	-0.21	-1.02	-1.61	-13.77
% of business turnover	-0.10%	-0.06%	-0.06%	-0.07%	-0.05%

Source: Deloitte analysis

In absolute terms, the smallest impacts are seen in the two smallest business brackets, however it is important to recognise that VAT and total turnover also decrease as business size decreases and as such the true impact of option 1 on business cash flows is understood when comparing the financing cost to business turnover within each business size bracket.

Businesses with turnover lower than EUR 50 000 see the largest impact as a result of the introduction of option 1 with an EU average additional financing cost of -0.10% of turnover. This impact reflects the fact that smaller businesses generally have higher input VAT liabilities (which can no longer be offset by output VAT collected). Smaller businesses may also face a longer delay in receiving refunds if they take advantage of schemes that allow them to submit returns less frequently. For all other business sizes the impact of this introduction is fairly consistent ranging from -0.05% to -0.07%, with the smallest percentage impact of the introduction of a split payment mechanism is seen by businesses with turnover greater than EUR 2 million. The weighted average additional financing cost across all business sizes is -0.05% of business turnover.

Sensitivity analysis on the interest rates for this option shows that relatively small changes in interest rates over time could considerably increase the realised cash flow impact on businesses. The increase of the total financing cost is estimated between EUR 2.27 to 9.49 billion, depending on the change in the average interest rate (more details are provided in Annex E – Section E.2.1).

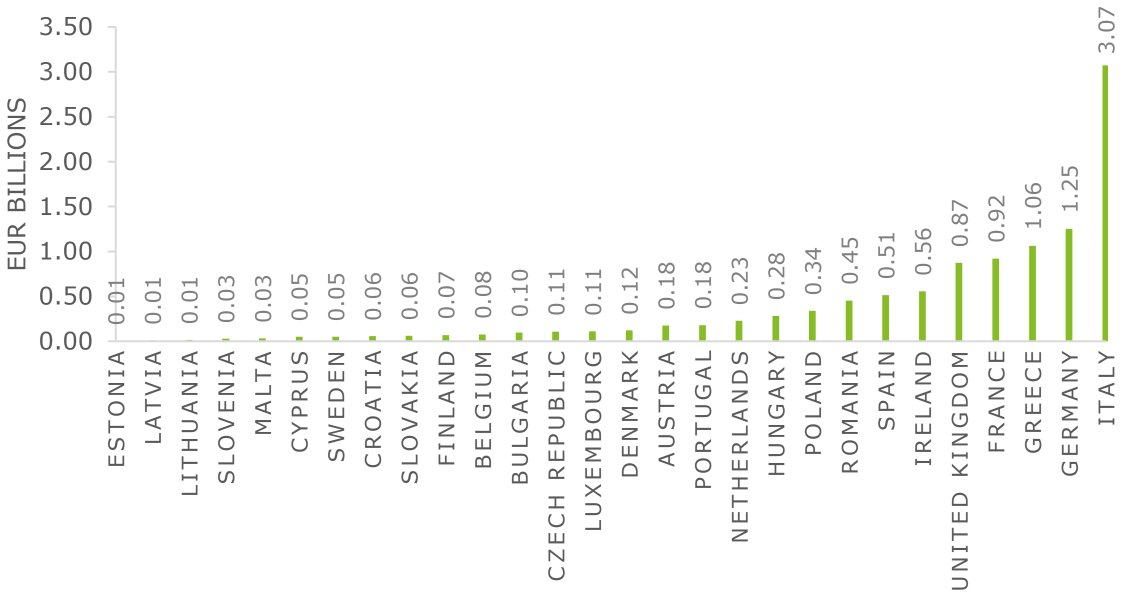
[137] Defined by businesses with turnover of greater than EUR 2 000 000

Cash flow impact for tax authorities

Cash flow Impact by Member State

In contrast to businesses, the introduction of this policy option is estimated to result in a **yearly cash flow benefit of EUR 10.79 billion to tax authorities** across the EU. The following graph shows the aggregate impact for each tax authority.

Figure 13: Option 1 - Aggregate cash flow impact for tax authorities



Source: Deloitte analysis

The largest impact on cash flows is estimated to be in Italy, Germany and Greece with a yearly benefit to tax authorities of EUR 3.07 billion, EUR 1.25 billion and EUR 1.06 billion respectively.[138]

The smallest impacts are seen within Estonia, Lithuania and Latvia with EUR 0.01 billion for each.[139]

For each of the policy options considered the cash flow implications estimated for each Member states' tax authority are impacted by several factors:

- the level of Gross and Net VAT subject to split payment within the Member State;
- the VAT return and refund period within the Member State, including the average delay of a refund after it has been requested; and
- the cost of government borrowing i.e. the interest rate.

[138] These impacts represent a 3.03%, 0.59% and 8.21% as a percentage of net VAT revenues collected by the respective Tax Authorities.

[139] This represents between 4-5% of the respective net VAT revenues collected by Tax Authorities within each country.

Italy and Germany have significantly larger Gross and Net VAT revenues compared to most other Member States. In addition, Italy has a large delay on processing refunds to businesses (up to 90 days after quarterly VAT refund request) and therefore authorities can hold input VAT for a longer period of time, earning interest. Although the proportion of VAT revenues in Greece are smaller than those collected by German and Italian tax authorities, Greece has significantly higher government interest rates (11%) and a longer average refund delay (334 days). As such Greece has the third largest positive cash flow impacts as a result of the application of a split payment mechanism within the country.

Sensitivity analysis shows that increases in average interest rates would result in additional cash flow benefits to tax authorities, ranging from EUR 2.22 to 8.99 billion (more details are provided in Annex E – Section E.2.1).

7.4.2 Option 1(b) – Option 1 with blocked VAT bank account

Blocked VAT (bank) accounts would enable the output VAT funds paid by the customer to the supplier's blocked VAT account to be used for input VAT payments, providing thus to the supplier at least limited access to these funds. The application of blocked VAT bank accounts would lead to a reduction on the cash flow impact to businesses as a result.

For the purposes of the study however a quantitative analysis has not been included due to the additional complexity and burden for businesses, as well as potential additional costs if separate bank accounts would need to be used (as in 2010 study) rather than just separate taxpayer VAT accounts at tax authorities (as in Azerbaijan). However, it is relevant to note that Poland is currently considering a split payment mechanism which would include blocked VAT bank accounts and that Romania has introduced such a system as from October 2017. As such any future analysis should consider these international experiences of the costs involved and the impact of reducing the cash flow implications to businesses.

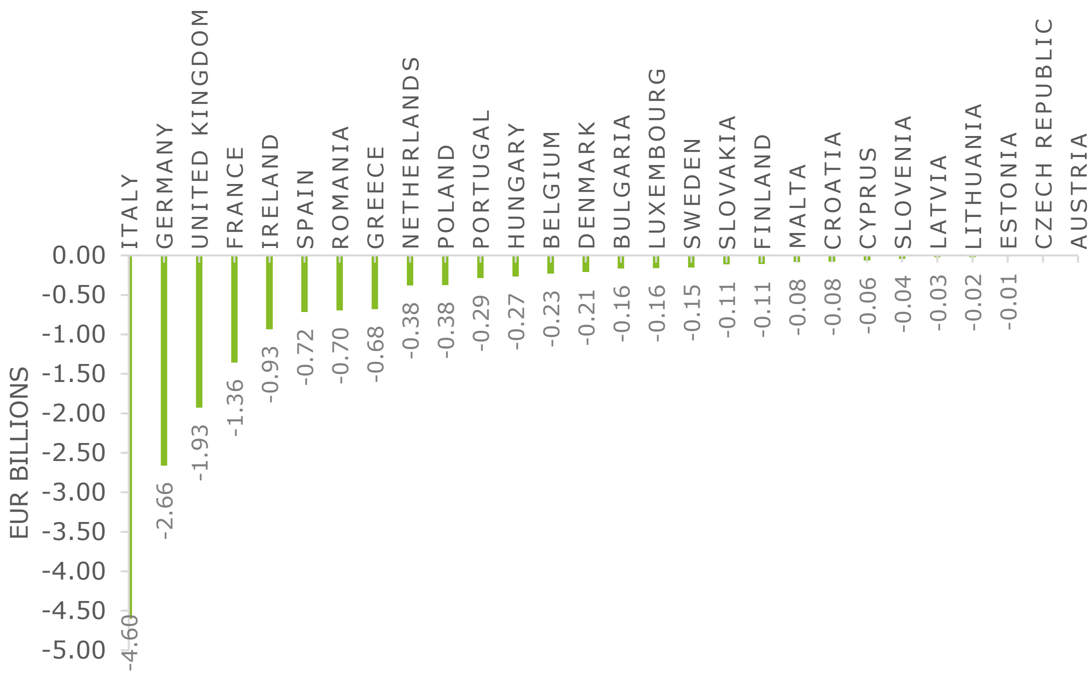
7.4.3 Option 2 – Option 1 combined with a generalised reverse charge mechanism in certain Member States

Cash flow impact for businesses

Cash flow impact by Member State

The impact of business cash flows reflects the impacts discussed above in Option 1, excluding any impact recorded for both Austria and the Czech Republic. Hence the introduction of the introduction of a split payment mechanism in Option 2 is estimated to result in a yearly financing cost of EUR 16.36 billion to affected businesses across the EU. The following table shows the aggregate impact at the Member State level.

Figure 14: Option 2 – aggregate cash flow impact for businesses



Source: Deloitte analysis

Sensitivity analysis shows that that relatively small changes in interest rates over time could considerably increase the realised cash flow impact on businesses, ranging from EUR 2.15 to 8.7 billion, depending on the change in the average interest rate (more details are provided in Annex E – Section E.2.2).

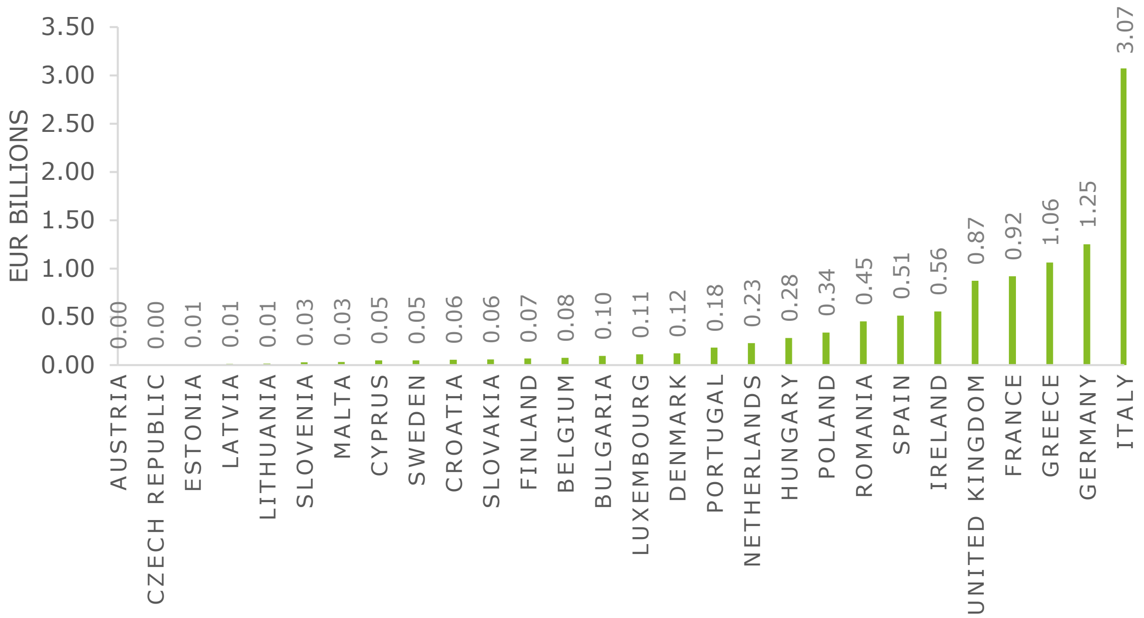
The impact by Member State (for those Member States that introduce a split payment mechanism on B2B EFT transactions) as well as the impact for the average business is estimated to be same as in Option 1.

Cash flow impact for tax authorities

Aggregate cash flow Impact

The introduction of this policy option is estimated to result in a **yearly cash flow benefit of EUR 10.50 billion to tax authorities across the EU**. For the Member States that apply the split payment mechanism of Option 2, the aggregate impact for each tax authority of this policy is the same as in Option 1.

Figure 15: Option 2 - aggregate cash flow impact for tax authorities



Source: Deloitte analysis

Sensitivity analysis shows that increases in average interest rates would result in additional cash flow benefits to tax authorities, ranging from EUR 2.11 to 8.52 billion (more details are provided in Annex E – Section E.2.2).

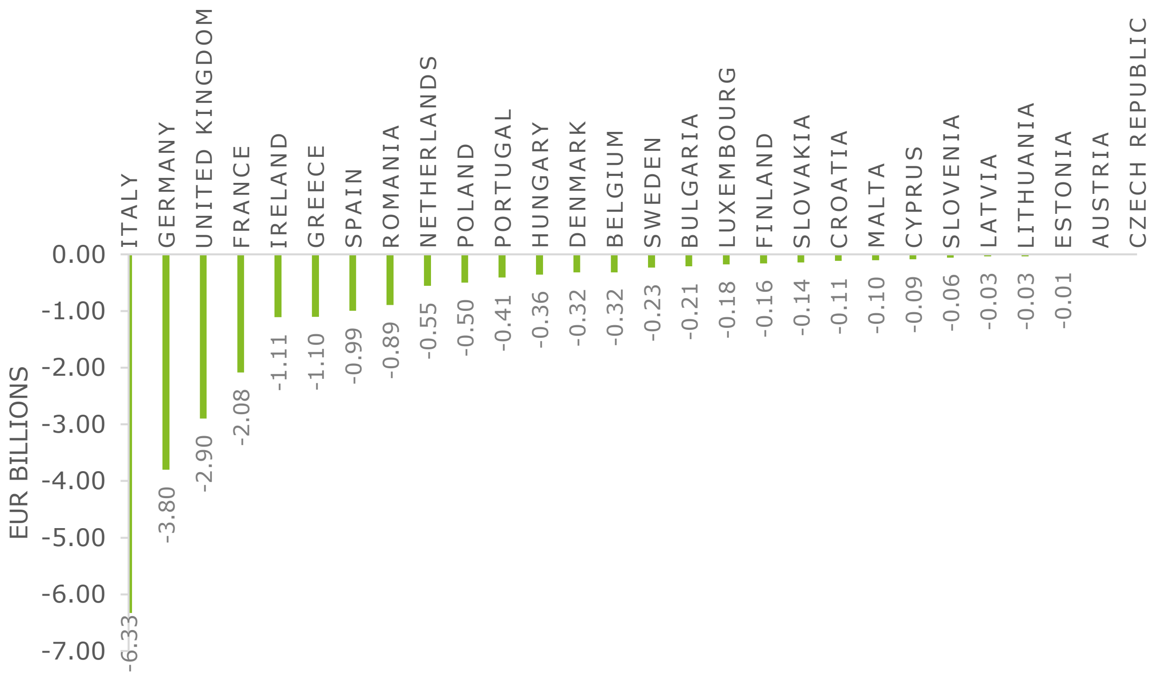
7.4.4 Option 3 – Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)

Cash flow impact for businesses

Cash flow impact by Member State

The introduction of a split payment mechanism on all EFT transactions is estimated to result in a yearly financing cost of EUR 23.2 billion to affected businesses across the EU. The table below shows the aggregate impact at the Member State level.

Figure 16: Option 3 – aggregate cash flow impact for businesses

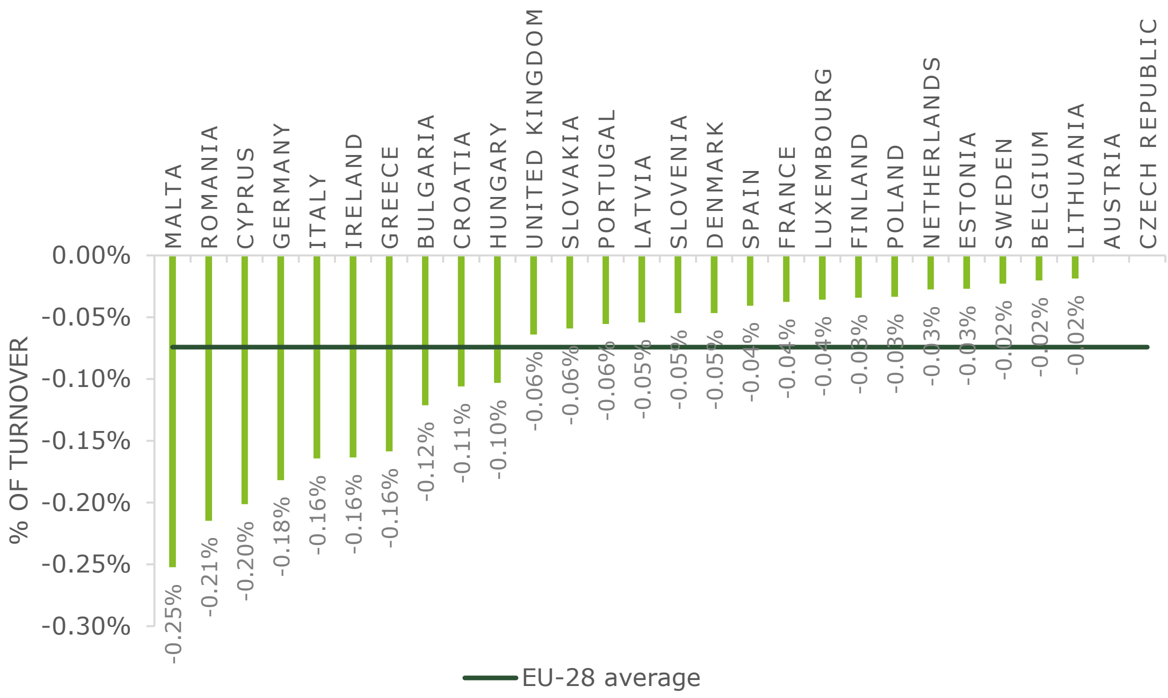


Source: Deloitte analysis

As in Option 1 and 2, Italy, Germany, UK and France see the largest impacts in absolute terms with a financing cost to businesses of EUR 6.33 billion, EUR 3.80 billion, EUR 2.90 billion and EUR 2.08 billion respectively. Similarly, the smallest impacts are seen within Estonia, Latvia and Lithuania with EUR 0.1 billion, EUR 0.03 billion and EUR 0.03 billion respectively.

This average impact can also vary considerably when viewed at the Member State level. The graph below shows the estimated impact of the average business within each Member State.

Figure 17: Option 3 – average cash flow impact by Member State



Source: Deloitte analysis

Similarly to under the previous options, under Option 3, Malta and Romania are estimated to have the largest impact within the EU in percentage terms, more than three times the EU average. The additional financing costs are estimated to be -0.25% and -0.21% of turnover respectively. In addition, five more Member States would see an impact of at least twice the EU average. However, nine Member States would see an impact less than half the EU average, for an average business.

Cash flow impact by business size

As in previous options the largest businesses within the EU see the majority of this impact with an aggregate yearly financing cost of EUR 18.73 billion. The following table provides the aggregate impact by different business sizes within the EU.

Table 25: Option 3 – EU-28 cash flow impact by business size

Turnover brackets	Less than EUR 50 000	EUR 50 000 to 100 000	EUR 100 000 to 500 000	EUR 500 000 to 2 000 000	More than EUR 2 000 000
EUR billions	-0.43	-0.29	-1.39	-2.18	-18.73
% of business turnover	-0.13%	-0.09%	-0.08%	-0.09%	-0.07%

Source: Deloitte analysis

When the cash flow impact is seen in the context of overall turnover, it is again smaller businesses that are estimated to face a higher impact. The introduction of option 3 results in businesses with turnover less than EUR 50 000 experiencing the largest impact on cash flows with an EU average additional financing cost of -0.13% of turnover. For all other business sizes the impact of this option ranges from -0.09% to -0.07%, with the smallest impact experienced by the largest businesses. The weighted average additional financing cost across all business sizes is -0.07% of business turnover.

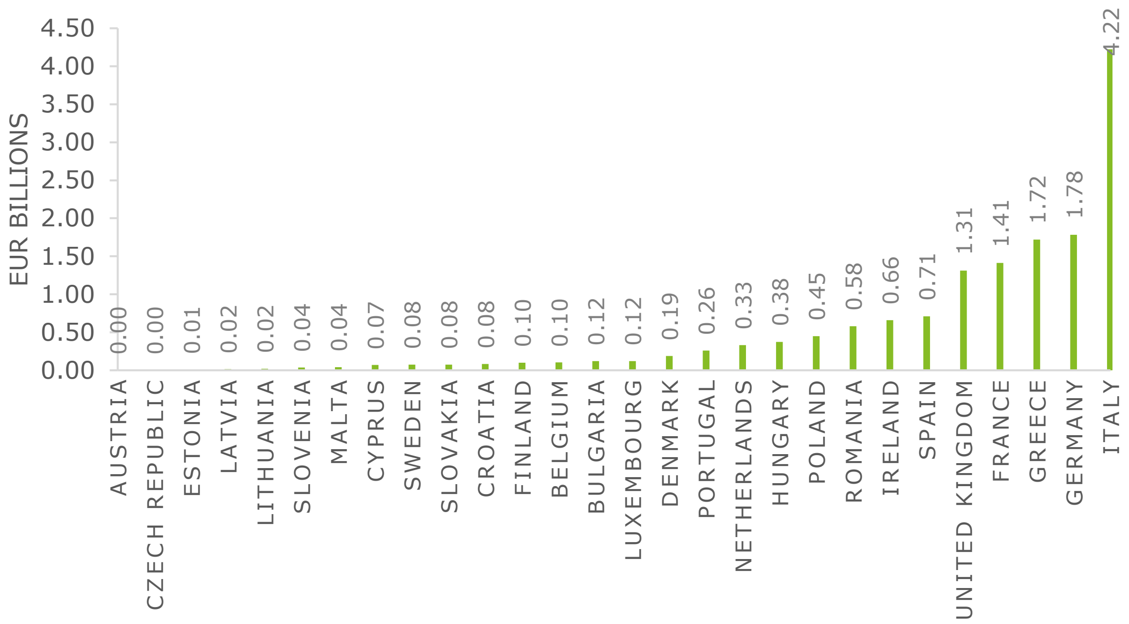
Sensitivity analysis on the interest rates for this option shows that increases in average interest rates would result in additional cash flow cost to businesses, ranging from EUR 3.05 to 12.34 billion (more details are provided in Annex E – Section E.2.3).

Cash flow impact for tax authorities

Cash flow impact by Member State

The introduction of this policy option is estimated to result in a **yearly cash flow benefit of EUR 14.97 billion to tax authorities across the EU**. The following graph shows the aggregate impact for each tax authority.

Figure 18: Option 3 – Aggregate cash flow impact for tax authorities



Source: Deloitte analysis

As for the other options, the largest impact on cash flows is estimated to be in Italy, Germany, Greece with a yearly benefit to tax authorities of EUR 4.22 billion, EUR 1.78 billion and EUR 1.72 billion respectively. The smallest impacts are seen within Estonia, Lithuania and Latvia with EUR 0.01 billion, EUR 0.02 billion and EUR 0.02 billion respectively.

Sensitivity analysis shows that increases in average interest rates would result in additional cash flow benefits to tax authorities, ranging from additional EUR 2.98 to 15.08 billion (more details are provided in Annex E – Section E.2.3) .

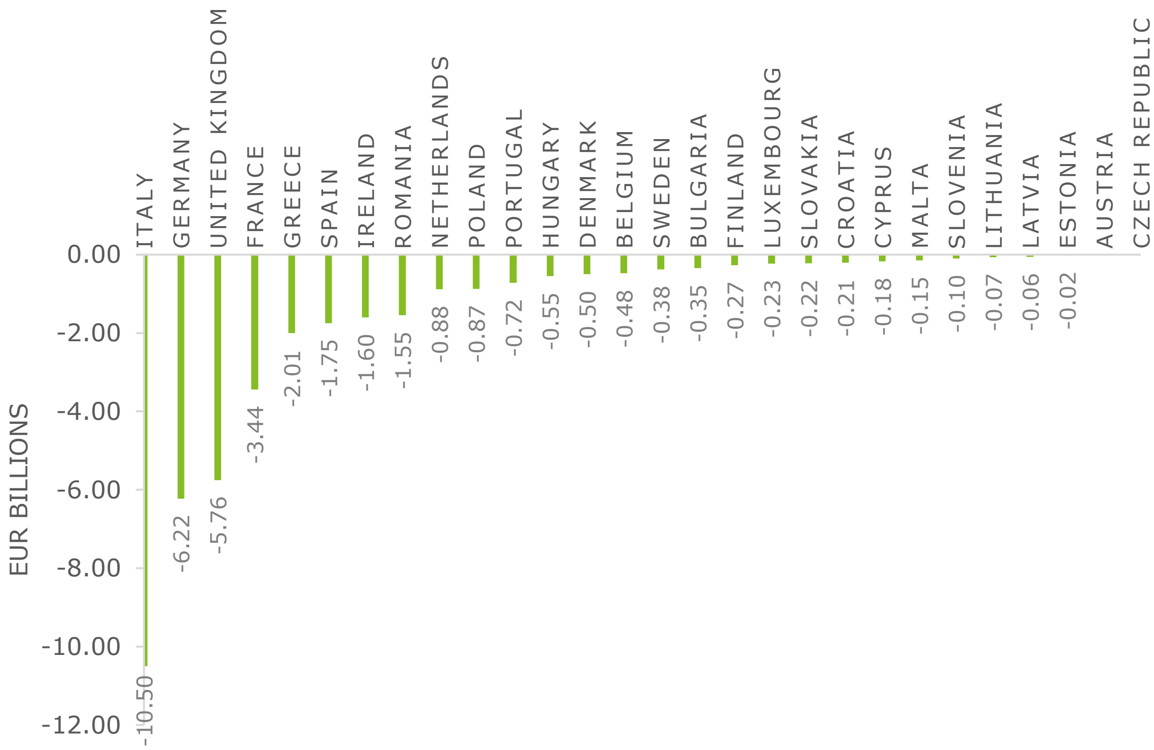
7.4.5 Option 4 – Option 3 with extension of split payment to credit card and cash payments

Cash flow impact for businesses

Cash flow impact by Member State

In addition to the impacts arising from Option 3, an increase in scope of the split payment mechanism will result in businesses being further affected. The introduction of a split payment mechanism on all payment and transaction types is estimated to result in **a yearly cost of EUR 39.5 billion across the EU**. The following table shows the aggregate impact for all businesses at the Member State level.

Figure 19: Option 4 – aggregate cash flow impact for businesses

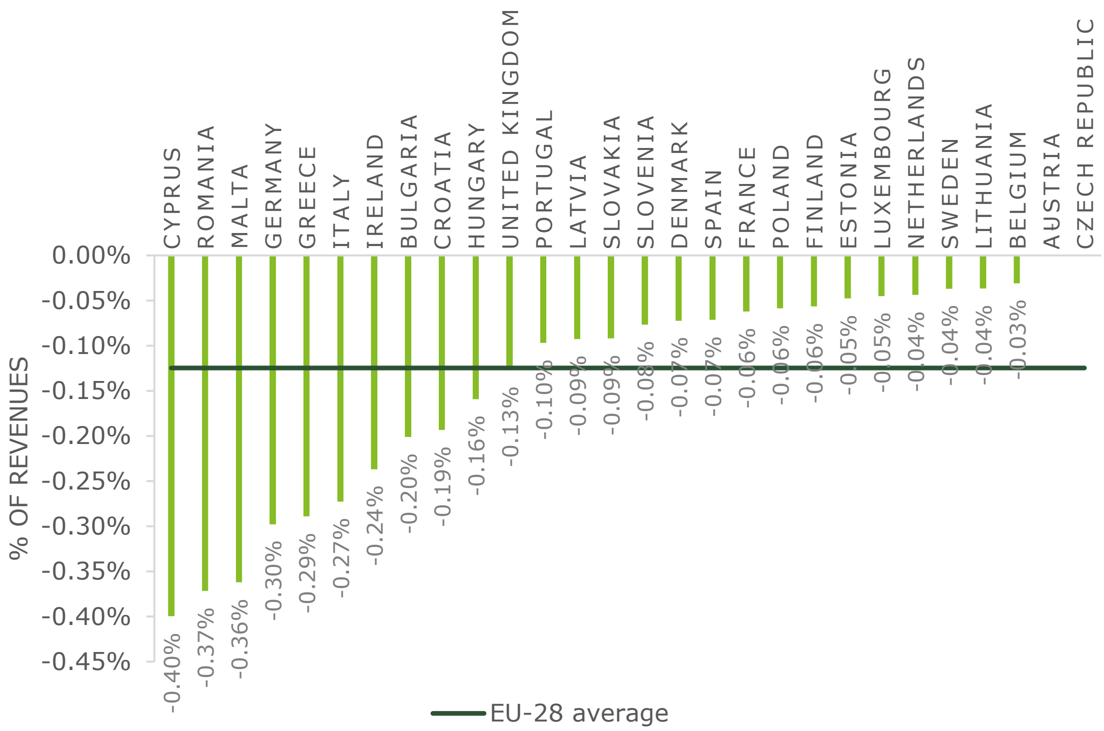


Source: Deloitte analysis

As with the previous three options, Italy, Germany, UK and France see the largest impacts in absolute terms with a yearly financing cost to businesses of EUR 10.50 billion, EUR 6.22 billion, EUR 5.76 billion and EUR 3.44 billion respectively. Similarly, the smallest impacts are seen within Estonia, Latvia and Lithuania with EUR 0.02 billion, EUR 0.06 billion and EUR 0.07 billion respectively.

The following graph provides estimates of the impact on the average business within each Member State.

Figure 20: Option 4 – Average cash flow impact by Member State



Source: Deloitte analysis

Under Option 4, Cyprus, Romania and Malta are estimated to have the largest impact, with an additional financing cost of -0.40%, -0.37% and -0.36% of revenues respectively. However, 9 Member States would see an impact less than half the EU average, for an average business, the smallest of which is seen in Lithuania and Belgium.

Cash flow impact by business size

As in previous options the largest impact in absolute terms is seen by businesses with a turnover more than EUR 2 000 000. The yearly financing cost for businesses within this sized bracket is EUR 31.90 billion. The following table provides the aggregate impact by different business sizes within the EU.

Table 26: Option 4 – EU-28 cash flow impact by business size

Turnover bracket	**Less than EUR 50 000**	**EUR 50 000 to 100 000**	**EUR 100 000 to 500 000**	**EUR 500 000 to 2 000 000**	**More than EUR 2 000 000**
EUR billions	-0.72	-0.46	-2.28	-3.67	-31.90
% of business turnover	-0.22%	-0.14%	-0.13%	-0.15%	-0.12%

Source: Deloitte analysis

The application of policy option 4 results in all businesses seeing the largest impact on their cash flow position and as such further increases in the additional financing costs. Businesses with turnover less than EUR 50 000 experience the largest impact on cash flows with an EU average additional financing cost of -0.22% of turnover. The resulting impact for all other business sizes ranges from -0.12% to -0.15%, with the smallest impact experienced by the largest businesses. The weighted average additional financing cost across all business sizes is -0.12% of business turnover.

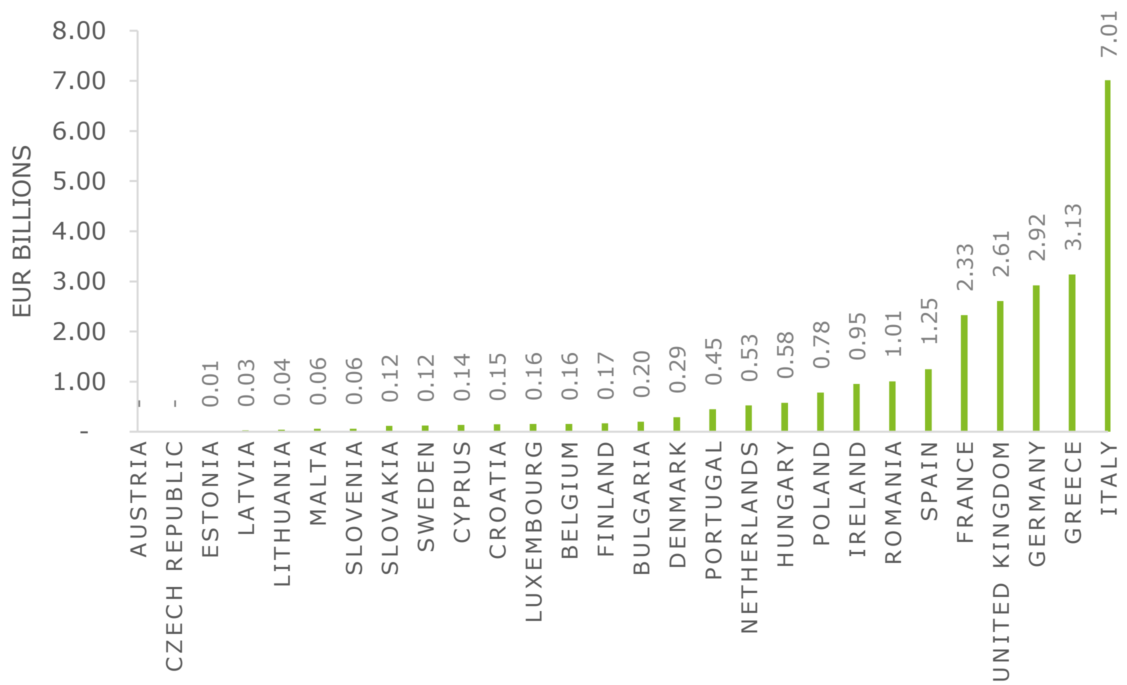
Sensitivity analysis on the interest rates for this option shows that increases in average interest rates would result in additional cash flow cost to businesses, ranging from EUR 5.17 to 20.85 billion (more details are provided in Annex E – Section E.2.4).

Cash flow impact for tax authorities

Cash flow impact by Member State

The introduction of this policy option is estimated to result in a **yearly cash flow benefit of EUR 25.48 billion to tax authorities across the EU**. The following graph shows the aggregate impact for each tax authority.

Figure 21: Option 4 – aggregate cash flow impact for businesses



Source: Deloitte analysis

The largest impact on cash flows is estimated to be in Italy, Greece and Germany with a yearly benefit to tax authorities of EUR 7.01 billion, EUR 3.13 billion and EUR 2.92 billion respectively. The smallest impacts are seen within Estonia, Latvia and Lithuania with EUR 0.01 billion, EUR 0.03 billion and EUR 0.04 billion respectively.

Sensitivity analysis shows that increases in average interest rates would result in additional cash flow benefits to tax authorities, ranging from EUR 5.05 to 20.41 billion (more details are provided in Annex E – Section E.2.4.

7.4.6 Option 5 – Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)

Preliminary comments for Options 5-7

The change from the current to the definitive VAT regime is expected to impact the overall VAT Gap, which is estimated to decrease to EUR 118.6 billion (compared to the EUR 150.2 billion estimated in 2015.

Under the definitive VAT regime, cross-border B2B goods transactions would also be taxed and therefore the cash flow related to VAT for businesses would increase as compared to the current VAT regime. However, given that the effective taxation of cross-border B2B goods transactions would be limited to supplies made to non-certified taxable persons. The baseline definition for the cash flow impact is therefore considered as identical in the current and definitive VAT regime.

The adoption rate of the CTP status is an important factor in determining the impact of the options based on the definitive VAT regime (options 5-7) and therefore two scenarios are considered:

- **Scenario 1**: A low take-up scenario (CTP = 70%); and
- **Scenario 2**: A high take-up scenario (CTP = 95%).

Under scenario 1, it is assumed that 70% of businesses that do intra-EU cross border trade are certified and hence are able to apply reverse charge on B2B supplies. In addition, for the purposes of the study it is assumed therefore that 70% of intra-EU cross border B2B revenue is also subject to the reverse charge mechanism. Similarly, for Scenario 2 it is assumed that both the proportion of CTP and relevant cross border revenues are 95%.

The scenarios chosen are taken as an example to illustrate what the potential order of magnitude of the cash-flow impact could be. These examples can in no way be taken as an indication as to what the percentage will be under the forthcoming proposals on the VAT definitive regime[140].

The assumptions on the share of CTPs are provided at EU level and applied across all Member States. As such when moving from scenario 1 to scenario 2 the same countries will see the largest and smallest impacts. Therefore when comparing the difference in impact between the two scenarios, it should only be considered at the EU level rather than at the Member State level.

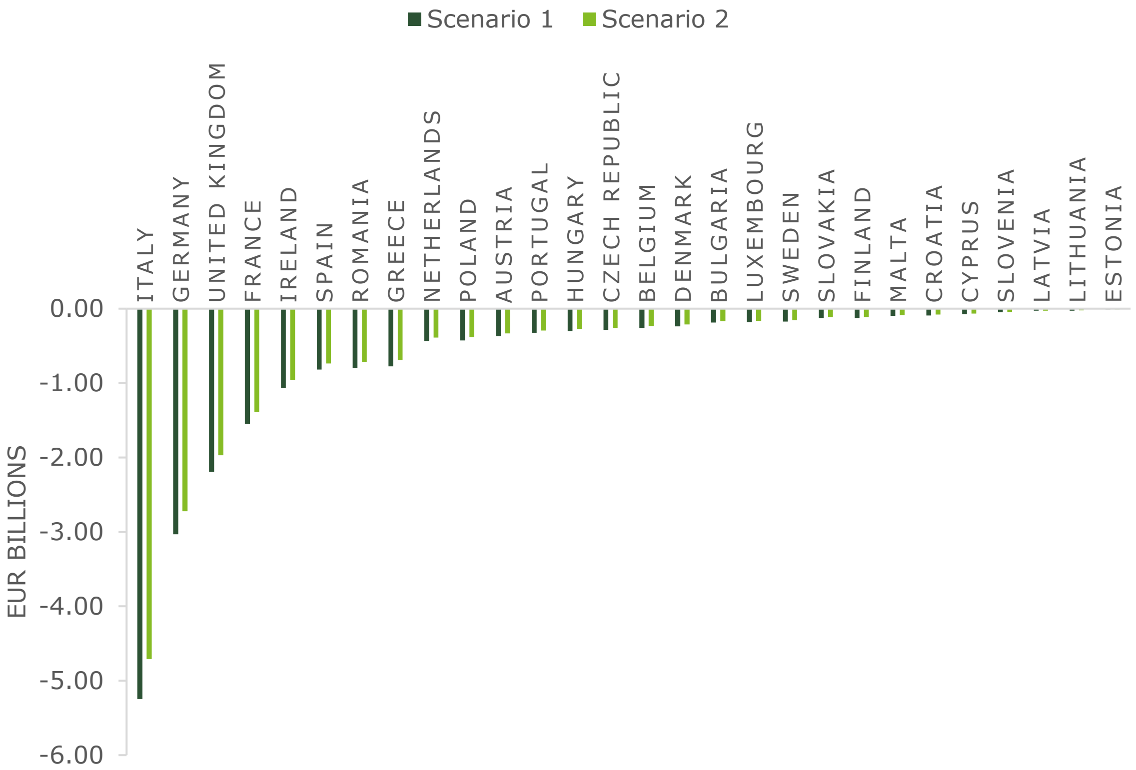
[140] The two scenarios have been discussed and agreed with the Commission. More details are provided in Annex B.

Cash flow impact for businesses

Cash flow impact by Member State

Under **scenario 1** the application of policy option 5 is estimated to result in **a yearly financing cost of EUR 19.29 billion to affected businesses across the EU**. An increase in CTP to 95% under **scenario 2** reduces this impact to **EUR 17.33 billion annually**. This is a direct consequence of an increase in the number of B2B businesses that do cross border trade being able to apply reverse charge as a result of being certified. The figure below shows the aggregate impact at the Member State level, which is relatively aligned with the impact as shown under Option 1.

Figure 22: Option 5 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2

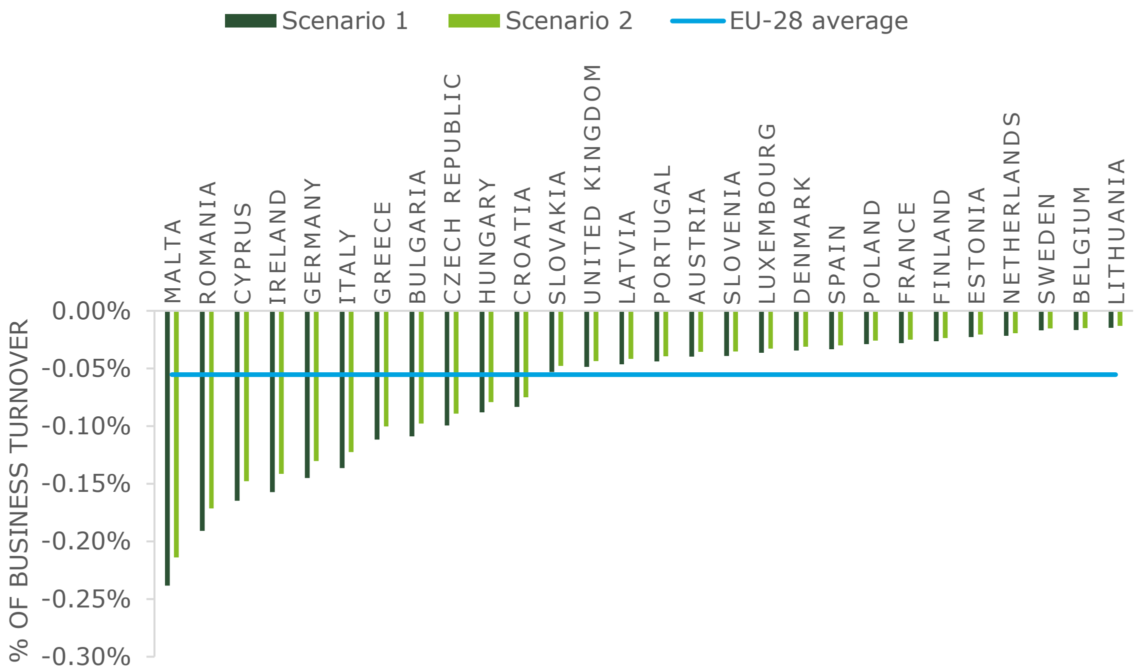


Source: Deloitte analysis

In both scenarios, the largest impact on cash flows is estimated to be in Italy, Germany, UK and France and the smallest impacts are seen within Estonia, Lithuania and Latvia.

The resulting impact on the average business can also vary when considered within each Member State. The following figure provides estimates of the impact of the average business within each Member State.

Figure 23: Option 5 – average cash flow impact by member state under CTP scenario 1 and scenario 2



Source: Deloitte analysis

Under Option 5, Malta and Romania are estimated to have the largest impact relative to business turnover at more than three times the EU average, with an additional financing cost of between -0.21% to -0.24% and -0.17% to -0.19% of turnover respectively. In addition, Ireland, Germany and Italy are estimated to have an impact of at least twice the EU average. However, 5 Member States would see an impact less than half EU average, including Sweden, Belgium and Lithuania.

Cash flow impact by business size

Both scenario 1 and scenario 2, estimate that the largest businesses within the EU see the majority of this impact with an **aggregate yearly financing cost of EUR 15.69 billion and EUR 14.09 billion respectively**. In absolute terms, the impact reduces significantly as the business size decreases. The following table provides the aggregate impact by different business sizes within the EU.

Table 27: Option 5 – EU-28 cash flow impact by business size

Turnover bracket	Less than EUR 50 000	EUR 50 000 to 100 000	EUR 100 000 to 500 000	EUR 500 000 to 2 000 000	More than EUR 2 000 000
Scenario 1 (EUR billions)	-0.37	-0.24	-1.16	-1.83	-15.69
Scenario 1 (% of business turnover)	*-0.11%*	*-0.07%*	*-0.07%*	*-0.08%*	*-0.06%*
Scenario 2 (EUR billions)	-0.33	-0.21	-1.04	-1.65	-14.09
Scenario 2 (% of business turnover)	*-0.10%*	*-0.06%*	*-0.06%*	*-0.07%*	*-0.05%*

Source: Deloitte analysis

Under both scenarios, option 5 results in the **average business with turnover less than EUR 50 000 experiencing the largest impact** on cash flows with an EU average additional financing cost of between -0.11% and -0.10% of turnover. For all other business sizes the impact of this introduction ranges from -0.05% to -0.08%, with the smallest impact experienced by the largest businesses. The weighted average additional financing cost across all business sizes is -0.06% of business turnover under scenario 1 and scenario 2.

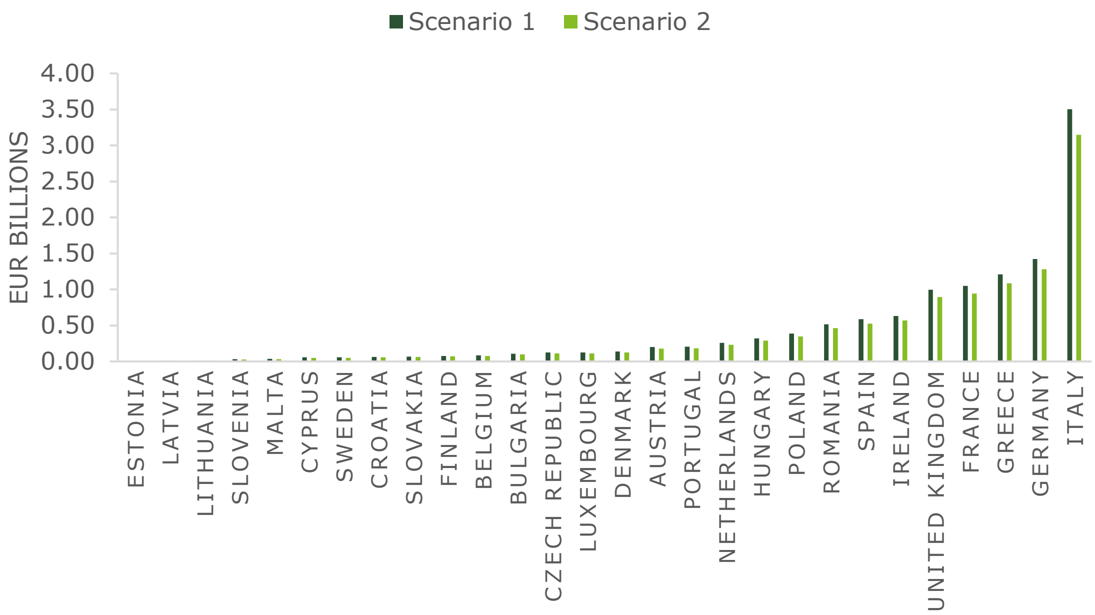
Sensitivity analysis shows that increases in average interest rates would result in additional cash flow costs to businesses, ranging from EUR 2.59 to 10.47 billion under scenario 1 and from additional EUR billion 2.32 to 9.4 billion under scenario 2 (more details are provided in Annex E – Section E.2.5).

Cash flow impact for tax authorities

Cash flow impact by Member State

The introduction of this policy option is estimated to result in a **yearly cash flow benefit of between EUR 11.04 billion and EUR 12.29 billion to tax authorities across the EU**. The following table shows the aggregate impact for each tax authority within the EU.

Figure 24: Option 5 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2



Source: Deloitte analysis

The largest resulting benefits of the introduction of a split payment system under option 5 are estimated to be in Italy, Germany and Greece with a yearly benefit ranging from EUR 1.09 billion to EUR 3.50 billion. Similarly to option 1, the smallest annual benefits are seen within Estonia, Latvia and Lithuania with EUR 0.01 billion, EUR 0.01 billion and EUR 0.01 billion to EUR 0.02 billion respectively.

Sensitivity analysis shows that increases in average interest rates would result in additional cash flow benefits to tax authorities, ranging from EUR 2.53 to 10.24 billion under scenario 1 and from EUR 2.27 to 9.2 billion under scenario 2 (more details are provided in Annex E – Section E.2.5) .

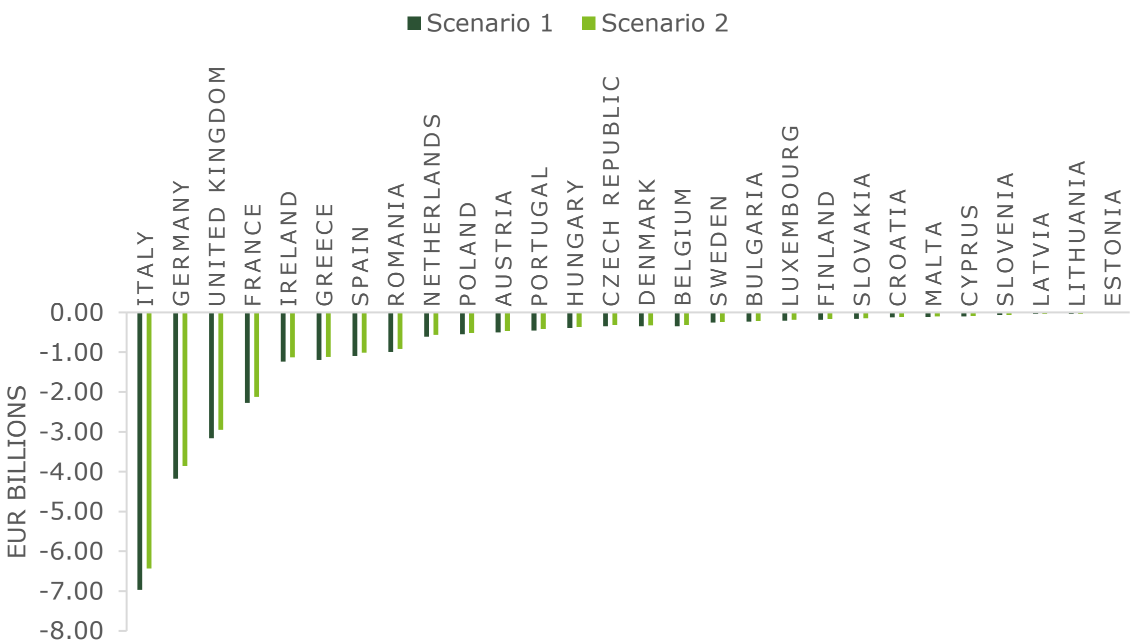
7.4.7 Option 6 – Option 5 with extension of split payment on EFT to B2C and B2G

Cash flow impact for businesses

Cash flow impact by Member State

Under **scenario 1** the application of policy option 6 is estimated to result in **a yearly financing cost of EUR 26.16 billion to affected businesses across the EU**. An increase in CTP to 95% under **scenario 2** reduces this impact to **EUR 24.19 billion annually**. The figure below shows the aggregate impact at the Member State level.

Figure 25: Option 6 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2

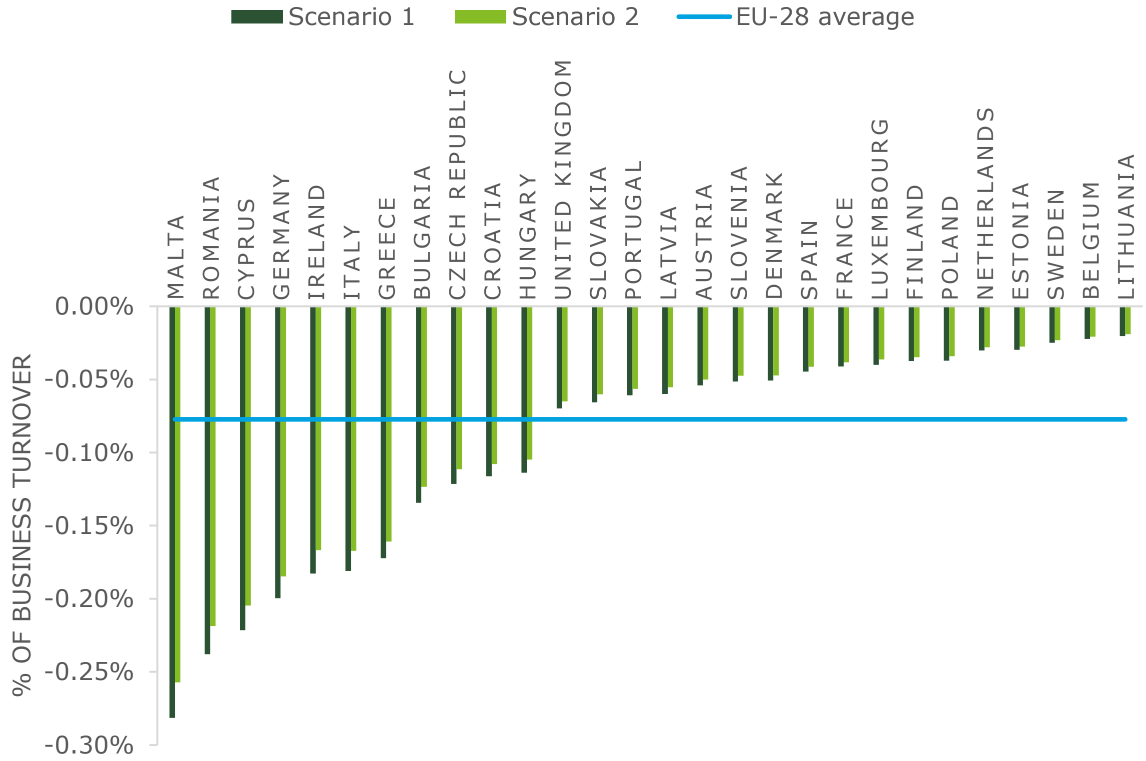


Source: Deloitte analysis

The largest impact on cash flows is estimated to be in Italy, Germany, UK and France with a financing cost to businesses ranging from EUR 2.11 billion to EUR 6.97 billion annually. Whereas the smallest impacts are seen within Estonia, Lithuania and Latvia with a yearly cash flow Impact ranging between EUR 0.01 billion and EUR 0.04 billion.

The following figure provides estimates of the impact of the average business within each Member State.

Figure 26: Option 6 – average cash flow impact by Member State



Source: Deloitte analysis

The introduction of a split payment mechanism to all EFT transactions under a definitive regime results in businesses within Malta, Romania and Cyprus facing the greatest cash flow implications. The additional financing cost of option 6 on these businesses is estimated to range between -0.20% and -0.28% of turnover. The smallest impact is seen in Sweden, Belgium and Lithuania with the average business within each Member State only having an additional financing cost of -0.02% under both scenarios.

Cash flow impact by business size

Under both scenarios, the businesses with turnover greater than EUR 2 million experience the majority of this impact with **an aggregate annual financing cost of between EUR 21.28 billion and EUR 19.69 billion**. The smallest is seen in the two smallest business size brackets with an aggregate impact ranging from EUR 0.50 billion to EUR 0.32 billion annually. The following table provides the aggregate impact by different business sizes within the EU.

Table 28: Option 6 – EU-28 cash flow impact by business size

Turnover brackets	Less than EUR 50 000	EUR 50 000 to 100 000	EUR 100 000 to 500 000	EUR 500 000 to 2 000 000	More than EUR 2 000 000
Scenario 1 (EUR billions)	-0.50	-0.32	-1.57	-2.48	-21.28
Scenario 1 (% of business turnover)	*-0.15%*	*-0.10%*	*-0.09%*	*-0.10%*	*-0.08%*
Scenario 2 (EUR billions)	-0.47	-0.30	-1.45	-2.29	-19.69
Scenario 2 (% of business turnover)	*-0.14%*	*-0.09%*	*-0.09%*	*-0.09%*	*-0.07%*

Source: Deloitte analysis

Option 6 results in businesses with turnover less than EUR 50 000 experiencing the largest impact on cash flows with an EU average additional financing cost ranging between -0.14% and -0.15% of turnover. For all other business sizes the impact of this introduction ranges from -0.07% to -0.10%, with the smallest impact experienced by the largest businesses in both scenarios. Under both scenario 1 and 2, the weighted average additional financing cost across all business sizes is -0.08% of business turnover.

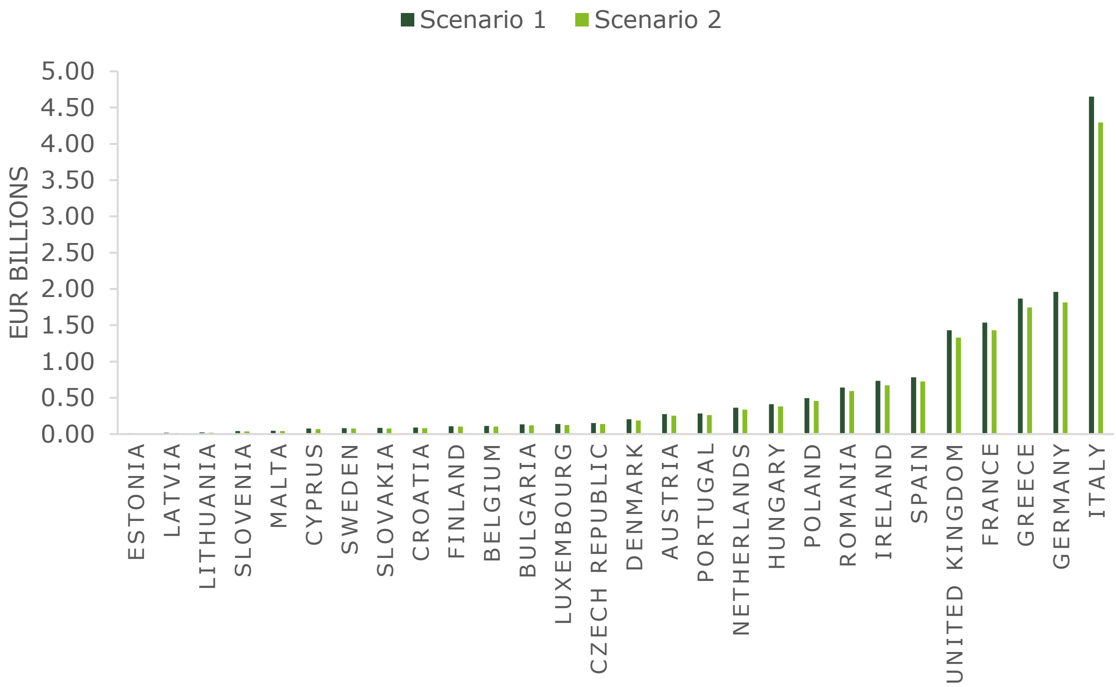
Sensitivity analysis shows that increases in average interest rates would result in additional cash flow benefits to tax authorities, ranging from EUR 3.52 to 14.28 billion under scenario 1 and from EUR 3.52 to 13.21 billion under scenario 2 (more details are provided in Annex E – Section E.2.6).

Cash flow impact for tax authorities

Aggregate cash flow Impact

The introduction of this policy option is estimated to result in a **yearly cash flow benefit of between EUR 15.51 billion to EUR 16.76 billion to tax authorities across the EU.** The following table shows the aggregate impact for each tax authority within the EU.

Figure 27: Option 6 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2



Source: Deloitte analysis

For each member state an increase in scope of the application of a split payment mechanism is estimated to result in an increase in annual benefits for each tax authority within the EU. As with the previous option, the largest impact on cash flows is estimated to be in Italy, Germany and Greece whilst the smallest impacts are seen within Estonia, Latvia and Lithuania.

Sensitivity analysis shows that increases in average interest rates would result in additional cash flow benefits to tax authorities, ranging from EUR 3.45 to 13.98 billion under scenario 1 and from EUR 3.19 to 12.93 billion under scenario 2 (more details are provided in Annex E – Section E.2.6).

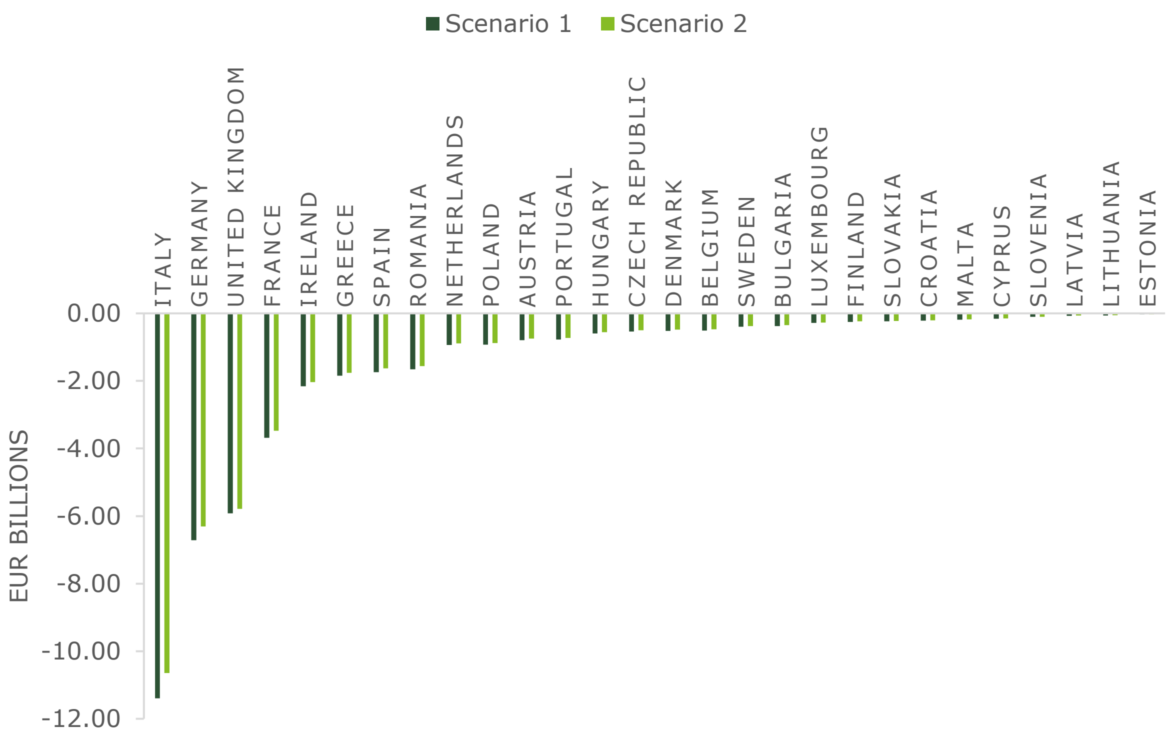
7.4.8 Option 7 – Option 6 with extension of split payment to credit card and cash payments

Cash flow impact for businesses

Cash flow impact by Member State

Under **scenario 1** the application of policy option 5 is estimated to result in a **yearly financing cost of EUR 43.05 billion to affected businesses across the EU**. An increase in CTP to 95% under **scenario 2** reduces this impact to **EUR 40.70 billion annually**. The table below shows the aggregate impact at the Member State level.

Figure 28: Option 7 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2

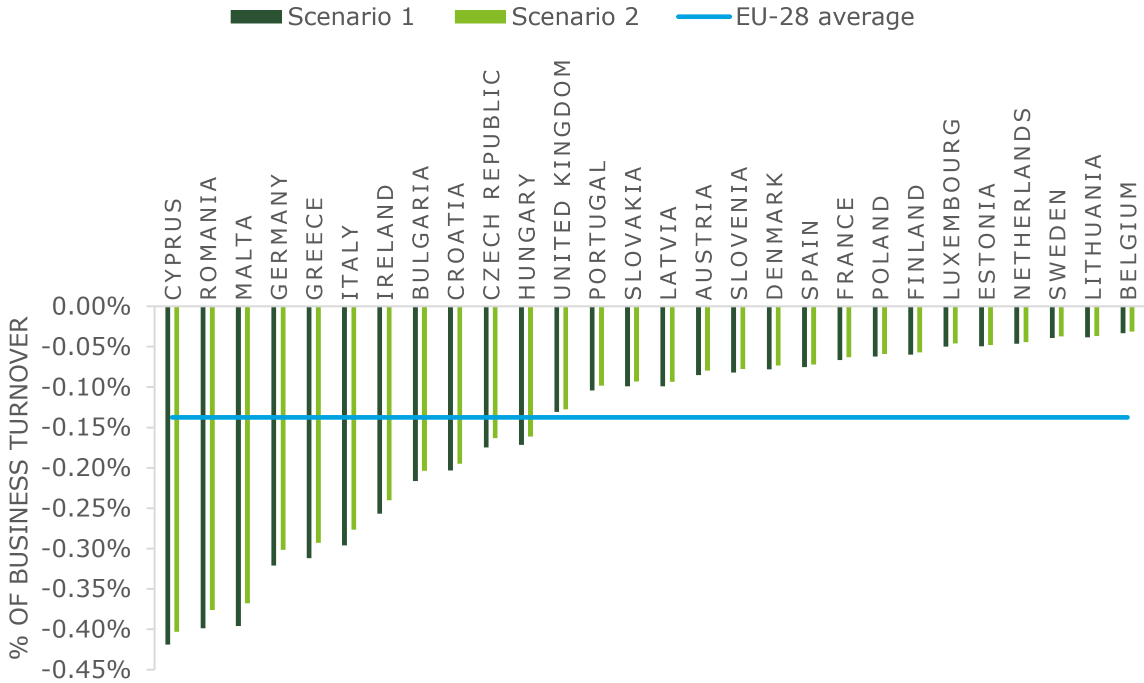


Source: Deloitte analysis

As with options 5 and 6, the largest impact on cash flows is estimated to be in Italy, Germany, UK and France whist the smallest impacts are seen within Estonia, Latvia and Lithuania.

The following graph provides estimates of the impact of the average business within each Member State.

Figure 29: Option 7 – average cash flow impact by member state



Source: Deloitte analysis

Under scenario 1, the application of a split payment mechanism under policy option 7 results in businesses in Cyprus, Romania and Malta experiencing the largest impact, with an additional financing cost of -0.42%, -0.40% and -0.40% of turnover respectively. The smallest impact is seen in Sweden, Belgium and Lithuania with the average business within each Member State only having an additional financing cost of -0.03, -0.04 and -0.04% respectively. The same variation in the magnitude of impact across Member States is seen in Scenario 2 as Scenario 1, albeit marginally reduced.

Cash flow impact by business size

The largest businesses within the EU see the majority of this impact with an **aggregate yearly financing cost ranging from EUR 33.26 to EUR 35.13 billion.** In absolute terms, businesses with turnover less than EUR 50 000 and turnover of between EUR 50 000 and EUR 100 000 see the smallest impacts with an annual impact between EUR 0.77 billion and EUR 0.82 billion and EUR 0.48 billion and EUR 0.51 billion respectively. The following table provides the aggregate impact by different business sizes within the EU.

Table 29: Option 7 – EU-28 cash flow impact by business size

	Less than EUR 50 000	EUR 50 000 to 100 000	EUR 100 000 to 500 000	EUR 500 000 to 2 000 000	More than EUR 2 000 000
Scenario 1 (EUR billions)	-0.82	-0.51	-2.53	-4.05	-35.13
Scenario 1 (% of business turnover)	*-0.25%*	*-0.15%*	*-0.15%*	*-0.17%*	*-0.13%*
Scenario 2 (EUR billions)	-0.77	-0.48	-2.37	-3.82	-33.26
Scenario 2 (% of business turnover)	*-0.23%*	*-0.14%*	*-0.14%*	*-0.16%*	*-0.13%*

Source: Deloitte analysis

Option 7 results in businesses with turnover less than EUR 50 000 experiencing the largest impact on cash flows with an EU-average additional financing cost of between -0.23% and -0.25% of turnover. For all other business sizes the impact of this introduction ranges from -0.13% to -0.17%, with the smallest impact experienced by the largest businesses. The weighted average additional financing cost across all business sizes is estimated to be between -0.13% and -0.14% of business turnover.

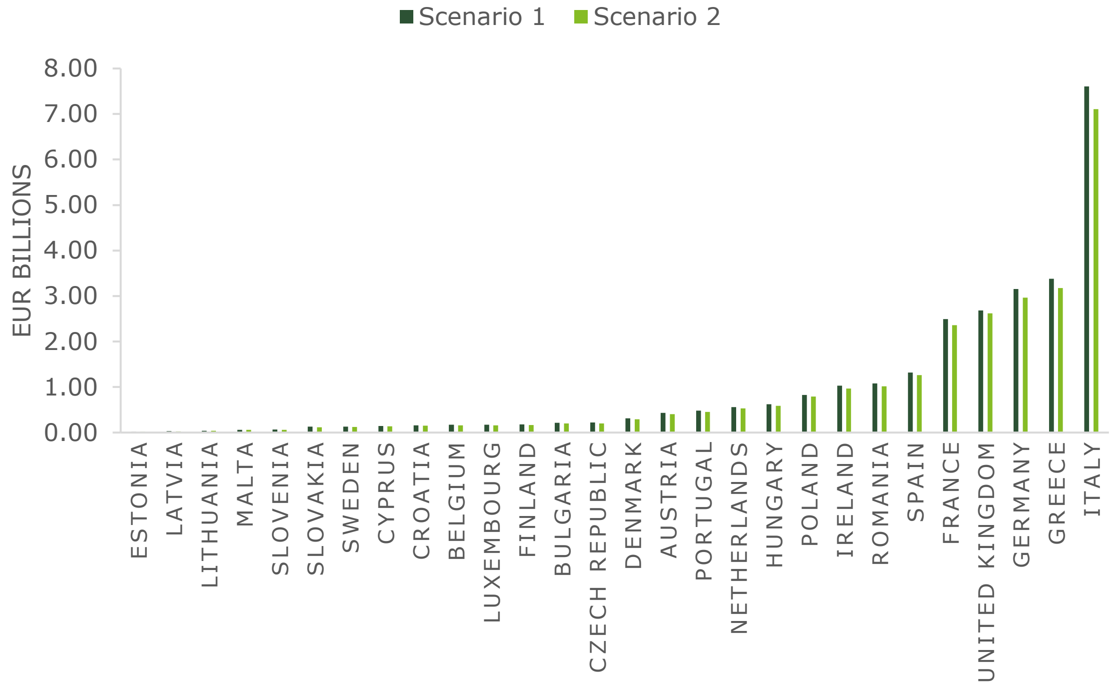
Sensitivity analysis shows that increases in average interest rates would result in additional cash flow costs to businesses, ranging from EUR 5.78 to 23.38 .billion under scenario 1 and from additional EUR 5.47 to 22.12 billion under scenario 2 (more details are provided in Annex E – Section E.2.7).

Cash flow impact for tax authorities

Aggregate cash flow Impact

Under **scenario 1**, the introduction of this policy option is estimated to result in **a yearly aggregate cash flow benefit of EUR 27.70 billion to tax authorities across the EU.** An increase in CTP from 70% to 95% will reduce these benefits as a larger proportion of cross border B2B and B2G supplies are subject to reverse charge. **Scenario 2** estimates that this will result in an **annual increase in cash flow benefits of EUR 26.15 billion**, which is EUR 1.55 billion less than scenario 1. The table below shows the aggregate impact for each tax authority within the EU.

Figure 30: Option 7 – aggregate cash flow impact for businesses under CTP scenario 1 and scenario 2



Source: Deloitte analysis

Under both scenarios the largest impact on cash flows is estimated to be in Italy, Greece and Germany with an annual benefit to tax authorities of EUR 7.11 billion - EUR 7.60 billion, EUR 3.18 billion - EUR 3.38 billion and EUR 2.96 billion - EUR 3.15 billion respectively.

Sensitivity analysis shows that increases in average interest rates would result in additional cash flow benefits to tax authorities, ranging from EUR 5.9 to 22.9 billion under scenario 1 and from EUR 5.35 to 21.66 billion under scenario 2 (more details are provided in Annex E – Section E.2.7).

7.4.9 Overview of cash flow impact

The comparative aggregate impact of the different policy options to cash flow for businesses and tax authorities are presented in the table below.

Table 30: Cash flow impact for businesses and tax authorities

Policy Option	Impact for businesses		Impact for tax authorities	
	Scenario	EU-28 (EUR billion)	Scenario	EU-28 (EUR billion)
Policy options based on the current VAT regime				
Policy Option 1	n/a	-16.93	n/a	10.79
Policy Option 2	n/a	-16.36	n/a	10.50
Policy Option 3	n/a	-23.23	n/a	14.97

Policy Option	Impact for businesses		Impact for tax authorities	
	Scenario	EU-28 (EUR billion)	Scenario	EU-28 (EUR billion)
Policy options based on the current VAT regime				
Policy Option 4	n/a	-39.50	n/a	25.48
Policy options based on the definitive VAT regime				
Policy Option 5	Scenario 1	-19.29	Scenario 1	12.29
	Scenario 2	-17.33	Scenario 2	11.04
Policy Option 6	Scenario 1	-26.16	Scenario 1	16.76
	Scenario 2	-24.19	Scenario 2	15.51
Policy Option 7	Scenario 1	-43.05	Scenario 1	27.70
	Scenario 2	-40.70	Scenario 2	26.15

Source: Deloitte analysis

Based on the above analysis, the following conclusions can be drawn regarding the impact of policy options on the cash flow for businesses and tax authorities:

- Introducing a split payment mechanism would lead to **opposite impacts for businesses and tax authorities.** Businesses in a VAT credit position would not be able to use their output VAT prior to receiving a refund and will therefore see a worsening of their cash flow position. These impacts are likely to be exacerbated the longer the delay in obtaining refunds. In contrast, tax authorities would benefit from earlier tax payments from transactions subject to split payment, improving their cash flow position.

- Overall, the **aggregate impacts** of the policy options would **increase as their scope of increases**, both for businesses and for tax authorities.
  - Option 2 is estimated to have the smallest impacts, with a yearly additional financing cost of EUR 16.36 billion for businesses and of a yearly benefit of EUR 10.50 billion for tax authorities. Conversely, Option 7 is likely to have the largest impacts, estimated between EUR 40.70 billion and EUR 43.05 billion of additional financing costs for businesses and between EUR 26.15 and EUR 27.70 annually of benefits for tax authorities (under scenario 1 and 2 respectively).

- For all options, **the largest impacts** are expected in Italy, Germany, United Kingdom and France **in absolute terms**, both for businesses and tax authorities. This is a result of a combination of factors including the amount of gross VAT revenues subject to split payment, the level of interest rates applicable and the period for VAT returns and refunds including delays. Lithuania, Estonia and Latvia are expected to have smallest impact, throughout the policy options.

- When the impact on businesses is analysed as **a percentage of turnover**, Cyprus, Malta and Romania are expected to have the largest impact for the average business, ranging from -0.14% and -0.21% (option 1) to -0.37% and -0.42% (option 7) of business turnover. The smallest impact would be in Belgium and Lithuania, with a yearly impact ranging from -0.01% (option 1) to -0.03% and -0.04% (option 7) of business turnover.

- Businesses with turnover less than EUR 50 000 are likely to experience the largest impact as a result of the introduction of all policy options with an EU average additional financing cost ranging from -0.10% of turnover (option 1) to -0.25% of turnover (option 7). This impact reflects the fact that smaller businesses generally have higher input VAT liabilities (which can no longer be offset by any output VAT collected). Smaller businesses may also face a longer delay in receiving refunds if they take advantage of schemes that allow them to submit returns less frequently.

- The **definitive VAT** regime would increase the gross VAT revenues as it would also include cross-border B2B goods transactions. Combined with split payment, it would increase the negative cash flow implications for certain businesses while increasing the positive repercussions for tax authorities. The additional cash flow impact which is a result of the introduction of the definitive regime only relates to supplies to non-CTP customers.

  - With regard to the **impacts on businesses**, comparing option 5 to option 1, option 6 to option 3 and option 7 to option 4, all are likely to have a greater impact on business cash flows even though the scope of the application of split payment remains the same.
  - With regard to the **impacts on tax authorities**, the largest impact can be observed when comparing options 7 and 4, which is estimated to have a resulting difference of between EUR 0.91 billion and EUR 2.46 billion annually.
  - Increasing the **number of CTP from 70% to 95%** (under scenario 1 and scenario 2 respectively) is expected to reduce the aggregate cash flow impact of options 5, 6 and 7 for both businesses and tax authorities, as it reduced the transactions (and therefore the VAT returns) subject to split payment.

7.5 Impact on administrative burden

The administrative burden is calculated through the Standard Cost Model (SCM) which provides a quantification of the costs faced by a "typical" business in complying with certain information obligations (IOs). The same method is used to estimate the administrative burden for public bodies for the relevant policy options.

The SCM is the primary tool for quantifying the administrative cost pressure on businesses introduced by a VAT split payment mechanism. The results of the SCM are one of the inputs for the overall CBA, which takes into account the costs and benefits of each of the policy options over the defined timeframe.

The SCM first identifies IOs resulting from EU VAT legislation that a 'typical', VAT registered EU business has to comply with. It then estimates the costs related to these IOs. The IOs, identified through interviews with businesses and Deloitte's tax expertise, may differ between the options depending on the option design. The baseline IOs include: IO1, IO2, IO3 and IO4 were explained above, however with the introduction of the split payment mechanism, two additional IOs are identified. These additional IOs are also valid for public bodies when a split payment is introduced:

Table 31: Information Obligations deriving from the Split Payment Mechanism

IO#	Type of obligation	Frequency	Description for businesses and public bodies
IO4a	Split Payment of VAT	Transactional	This IO consists of the payment of the VAT amount directly to the tax authority when paying the supplier invoice.
IO5	Split Payment Sales List / Purchase List	Monthly	Transactions that are subject to split payment must be recorded in a sales / purchase list and submitted to the tax authorities every month. This IO was introduced as part of the design of the options for split payment in order to provide tax authorities with an instrument to reconcile transactions subject to VAT.

As in the baseline, each IO is assessed for a 'typical' business within a set of turnover categories. The overall results for all businesses in the EU and individual businesses are calculated on a weighted average.

In the baseline we saw that the total administrative VAT-related costs amount to **EUR 2 600 per business** per year or EUR **74.2 billon** for all businesses per year. This baseline figure also applies to all VAT-registered businesses in the EU, which are estimated to be at around 29 million. The burden for businesses and public bodies in the definitive VAT regime baseline is not considered to differ significantly from the baseline in the current regime (see Section 7.2.1), given the fact that the administrative obligations that would accompany the definitive VAT regime are still very uncertain.

The results of the SCM analysis for each option below is measured against this baseline. An overview of the impacts per option compared to the baseline is presented at the end of this section.

7.5.1 Option 1 - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)

Administrative burden for businesses

Option 1 involves the introduction of a split payment mechanism to electronic fund transfers (EFT) between taxable persons (B2B) only. In practice, it means that a supplier to a business customer is no longer liable for the collection of VAT on EFTs. The business customer is liable for paying the VAT via EFT directly to the tax authority on payment of the invoice to the supplier.

With regard to the impact on the administrative burden, virtually every VAT-registered business is affected by this option since all businesses conduct B2B transactions to some extent. When a business is purchasing from another business they therefore have the additional obligation to **pay the VAT** directly to the tax authority. When selling to another VAT-registered business, the supplier has the obligation to ensure that the information needed for the customer to pay the VAT (i.e. VAT rate and VAT payable, split payment reference) is provided on the invoice.

In addition, a supplier would also need to submit a monthly **Split Payment Sales List** containing the full list of invoices issued to customers liable to split the VAT. Registered business customers would likewise have to submit a **Split Payment Purchase List** on a monthly basis.

Therefore additional IOs compared to the baseline (Option 0) are:

- Payment of split VAT (on transactional basis); and
- Split Payment Sales List / Purchase List (on monthly basis).

The overall costs of the administrative burden of businesses is provided in the table below.

Table 32: Administrative burden costs for businesses under Option 1

Information Obligation		Option 1		Baseline	
		Total cost for all businesses (EUR)	Total cost for 1 business (EUR)	Total cost for all businesses (EUR)	Total cost for 1 business (EUR)
IO1	VAT registration	2.7 billion	94	2.7 billion	94
IO2	Invoicing (domestic, B2B)	23.8 billion	831	238 billion	831
IO3	VAT Return (domestic)	48.6 billion	1 693	47.4 billion	1 652
IO4	VAT payment (domestic)	232.7 million	8	233 million	8
IO4a	Split Payment of VAT (domestic, B2B)	8.6 billion	299	*Not applicable in baseline*	
IO5	Split Payment Sales/Purchase List	14.4 billion	503	*Not applicable in baseline*	
	Total	**98.4 billion**	**3 428**	**74.2 billion**	**2 584**

Source: Deloitte estimates based on SCM analysis[141]

From the table above and results of the SCM on the baseline scenario, we can expect an **increase of about 33%** in the administrative costs to individual businesses with the introduction of a split payment mechanism for B2B EFT transactions. For all businesses in the EU, a 30% increase is also expected (i.e. from EUR 74.2 billion to EUR 98.4 billion).

The main driver of the costs is the new IO '**Split Payment of VAT'** which essentially doubles the amount of payments that a business customer needs to make to complete a transaction. This cost depends on the number of purchases that a business makes and can differ substantially between business size and industry. Thus, sensitivities around the number of transactions of a business have been carried out (see below Annex E – Section E3.2). In fact, the volume of invoices and related payment of VAT via split payment is the main cost driver for businesses.

The other additional IO – the monthly '**Split Payment Sales/Purchase List**' is not as time consuming in comparison and is expected to result in an annual cost of approximately **EUR 500** per business per year. Based on information gathered from interviews with businesses, we understand that the type of information produced in these lists would already be collected and managed in bookkeeping systems. The additional time is therefore only spent on compiling the list (downloading it from the system), checking it and submitting it to the tax authorities. Like IO4a, the length of time needed to complete the sales/purchase list will depend on the overall number of transactions and sensitivities have also been carried out in relation to this.

Additionally, an increase in the amount of time it takes for **preparing the VAT return** is also expected with this option. Since the VAT return will have to distinguish between VAT that was paid the 'regular' way (i.e. VAT return in the baseline) and VAT that was paid using the split payment mechanism, the method of completing the return will differ slightly. In practical

[141] Annex D provides the breackdown of costs calculated per each turnover category.

terms, and depending on the Member State preferences, it may involve a separate section for filling in the split transactions. The business therefore has to account for additional time that it would take to check the split between transactions and ensure accurate reporting. On average it is estimated that the time required would increase by about 12%-28%, depending on the size of the business, resulting in an annual cost of **EUR about 1 695 per business per year** for submitting VAT returns.

Despite the fact that businesses will likely have to adjust their current invoice template to ensure that all necessary information is provided on the invoice for the customer to split the payment, this is not expected to affect the time it takes to produce an individual invoice. Therefore there is **no change in invoicing costs compared to the baseline**. The adjustment to invoicing templates is regarded as a one-off adjustment to the system used by the business and is included in the cost of implementation (see Section 7.6.1).

There are no costs for **public bodies** under Option 1.

Sensitivity analysis on the number of transactions

As mentioned above, the two new IOs are influenced heavily by the number of transactions conducted by a business within the year:

- **Upper bound:** When the number of transactions increases by 20%, the cost for one business is approximately **EUR 3 700,** and **EUR 104.9 billion** for all businesses per year, resulting in a 41% increase on the baseline respectively and of a 6.6% increase with respect to the standard scenario.
- **Lower bound:** When the number of transactions decreases by 20%, the cost for one business is approximately **EUR 3 200** and **EUR 91.9 billion** for all businesses per year, resulting in a 24% increase on the baseline respectively and of a 6.6% decrease with respect to the standard scenario.

In the upper bound scenario, the results are only marginally different than from the standard scenario as the increase on the baseline remains the same. In the lower bound however, the increase on the baseline is results are much lower. The full results of the sensitivity analysis can be found in Annex E – Section E3.2).

Overall administrative costs

Public bodies are not impacted by Option 1 and therefore bear no costs. The overall administrative costs for Option 1 amount to EUR 98.4 billion. This is a 33% increase on the baseline and accounts for approximately 0.674% of the EU GDP[142].

[142] Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.

7.5.2 Option 1(b) - Option 1 with blocked VAT account

Option 1 (b), a variation of option 1, includes the use of a blocked VAT bank account in a split payment mechanism applying only to B2B EFT transactions.

The administrative costs associated with the introduction of a blocked VAT bank account are higher than those without such account. In comparison to the baseline, the administrative costs of the split payment mechanism are expected to increase by approximately 35% to **EUR 3 500** per business per year and **EUR 100.1 billion** for all businesses per year.

Table 33: Administrative burden costs for businesses under Option 1(b)

Information Obligation		Option 1 (b)		Baseline	
		Total cost for all businesses	Cost for 1 business (EUR)	Total cost for all businesses (EUR)	Cost for 1 business (EUR)
IO1	VAT registration	2.7 billion	94	2.7 billion	94
IO2	Invoicing	23.8 billion	831	238 billion	831
IO3	VAT Return	50.3 billion	1 754	47.4 billion	1 652
IO4	VAT payment	232.7 million	8	233 million	8
IO4a	Split Payment of VAT	8.6 billion	299	*Not applicable in baseline*	
IO5	Split Payment Sales/Purchase List	14.4 billion	504	*Not applicable in baseline*	
	Total	**100.1 billion**	3 487	**74.2 billion**	**2 584**

Source: Deloitte estimates based on SCM analysis

In addition to the costs of Option 1, the business is also burdened with the 'management' of an additional account. As explained in the description of the option (see Section 6.3.2) the most intrusive change for suppliers will be the **need to check the receipt of VAT payments** from customers to their blocked VAT account and the **need to reconcile** the data of two bank accounts and two flows of cash through their accounting systems. This is reflected in an increase in the time it takes to complete the VAT return. Across all turnover categories, the VAT Return increases by 24%-43%, resulting in an overall cost of EUR **1 800 per business per year** or **EUR 50.3 billion** for all businesses per year.

As with Option 1, there are no costs to **public bodies** for the split payment.

Overall administrative costs

Public bodies are not impacted by Option 1(b) and therefore bear no costs. The overall administrative costs for Option 1(b) amount to EUR 100.1 billion. This is a 35% increase on the baseline and accounts for approximately 0.686% of the EU GDP[143].

[143] Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.

7.5.3 Option 2 - Option 1 combined with a generalised reverse charge mechanism in certain Member States

Option 2 combines the application of the split payment mechanism (as described in Option 1) with a Generalised Reverse Charge Mechanism (GRCM) in some Member States. This means that split payment would apply only in Member states where the GRCM does not. As mentioned in Section 7.3.3 for the purposes of assessing the costs, it is assumed that a GRCM would apply only in two Member States: Austria and Czech Republic (see Annex B - Section B.3.2).

In terms of individual business costs, there is no change with regard to Option 1. The only difference is that less businesses are impacted by the split payment mechanism. In this case we therefore have **about 28 million** businesses impacted.

The individual costs per business are therefore about 3 431 per year, a 33% increase on the baseline.

The costs for all businesses impacted are about EUR 94.5 billion per year, a 27% increase on the baseline.

Table 34: Administrative burden costs for businesses under Option 2

Information Obligations		Option 2		Baseline	
		Total cost for all businesses	Cost for 1 business (EUR)	Total cost for all businesses (EUR)	Cost for 1 business (EUR)
IO1	VAT registration	2.6 billion	94	2.7 billion	94
IO2	Invoicing	22.9 billion	831	238 billion	831
IO3	VAT Return	46.7 billion	1 695	47.4 billion	1 652
IO4	VAT payment	223.7 million	8	233 million	8
IO4a	Split Payment of VAT	8.2 billion	299	*Not applicable in baseline*	
IO5	Split Payment Sales & Purchase List	13.9 billion	504	*Not applicable in baseline*	
	Total	**94.5 billion**	**3 431**	**74.2 billion**	**2 584**

Source: Deloitte estimates based on SCM analysis

There are no costs to **public bodies** for the split payment in Option 2.

Sensitivity analysis on the number of transactions

The results of sensitivity analysis for Option 2 are the same as in Option 1 for the individual business costs. However, since the only difference is the number of businesses impacted, the overall cost for all businesses in the EU are different.

- **Upper bound:** When the number of transactions increases by 20% the cost for one business is approximately **EUR 3 600,** and **EUR 99.7 billion** for all businesses per year, resulting in a 40% and 34% increase on the baseline, respectively. It also corresponds to a 5% increase in the overall administrative burden for businesses with respect to the standard scenario for this option.

- **Lower bound:** When the number of transactions decreases by 20%, the cost for one business is approximately **EUR 3 200** and **EUR 88.3 billion** for all businesses per year, resulting in a 24% and 19% increase on the baseline, respectively. It also corresponds to a 7% decrease in the overall administrative burden for businesses with respect to the standard scenario for this option.

The full results of the sensitivity analysis can be found in Annex E – Section E3.3).

Overall administrative costs

Public bodies are not impacted by Option 2 and therefore bear no costs. The overall administrative costs for Option 2 amount to EUR 94.5 billion. This is a 27% increase on the baseline and accounts for approximately 0.647% of the EU GDP[144].

7.5.4 Option 3 - Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)

Administrative burden for businesses

Option 3 extends the application of the split payment mechanism to B2C and B2G EFT transactions, while not applying in Member States that choose to apply a GRCM. The number of businesses impacted is estimated at 28 million across the EU.

With the addition of B2C and B2G transactions the administrative costs increase for the individual business. As explained in Option 1, the main driver of administrative costs is the **payment of VAT to the tax authority due to the split payment mechanism**. This not only implies performing two payments per transaction, but also related registering and bookkeeping procedures (see Annex C - Section C.10 for more detailed description).

In Option 3, B2B and B2G transactions are split on a transactional basis. However with a B2C supply, the supplier is still liable for the payment of the VAT and thus must perform daily payments for its B2C supplies. Therefore the increase in the number of split payments to the tax authority consist of payments for each working day (calculated at 310 per year) and the number of invoices sent to businesses and public body customers.

Further, since more transactions now have to be recorded as split transactions (to include B2G sales), the split payment Sales and Purchase lists become longer and more complex to manage. Similarly, the VAT return will change to account for these types of transactions, owing to additional time taken to complete the return. The table below shows the costs

[144] Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.

associated with the administrative burden of businesses under Option 3. Overall, the costs under Option 3 are expected to increase by **57%** for individual businesses compared to the baseline, and **51%** for all businesses in the EU.

Table 35: Administrative burden costs for businesses under Option 3

Information obligations		Option 3		Baseline	
		Total cost for all businesses (EUR)	Cost for 1 business (EUR)	Total cost for all businesses (EUR)	Cost for 1 business (EUR)
IO1	VAT registration	2.6 billion	94	2 684 800 372	94
IO2	Invoicing (B2B)	22.9 billion	831	23 848 007 365	831
	Invoicing (B2G)*	990.5 million	142	*Not applicable in baseline*	
	Invoicing (B2B & B2G)	23.9 billion	973	23 848 007 365	831
IO3	VAT Return	48.9 billion	1 786	47 415 144 160	1 652
IO4	VAT payment	223.7 million	8	232 700 023	8
IO4a	Split Payment of VAT (B2B)	17.4 billion	632	*Not applicable in baseline*	
	Split Payment of VAT (B2G)*	325.1 million	57		
	Split Payment of VAT (B2B & B2G)	17.7 billion	689		
IO5	Split Payment Sales & Purchase List	18.5 billion	673	*Not applicable in baseline*	
Total		**111.8 billion**	****Lower 4 024 Middle 4 061 Upper 4 223**	**74 180 651 920**	**2 584**

Source: Deloitte estimates based on SCM analysis
**Does not apply to all businesses*
*** Lower = cost for businesses that do not have any transactions with public bodies (i.e. only B2B); Upper = cost for businesses that have transactions with businesses and bodies (B2B & B2G); Middle = weighted average cost across all businesses.*

It is assumed that not all businesses sell/purchase to/from public bodies. Based on the business turnover, the number of businesses transacting with public bodies ranges from 5% in the lowest category to 40% in the highest. This results in different costs for the individual business depending on whether they conduct B2B transactions only or B2B and B2G transactions. Overall, the “middle” cost represents the calculated weighted average across both types of businesses.

Sensitivity analysis on the number of transactions for businesses

The results of sensitivity analysis for Option 3 are relatively similar to Options 1 and 2.

- **Upper bound:** When the number of transactions increases by 20% the cost for one business is approximately **EUR 4 300,** and **EUR 118.3 billion** for all businesses per year, resulting in a 67% and 59% increase on the baseline, respectively. It also corresponds to a 6% increase in the overall administrative burden for businesses with respect to the standard scenario for this option.

- **Lower bound:** When the number of transactions decreases by 20%, the cost for one business is approximately **EUR 3 800** and **EUR 105.3 billion** for all businesses per year, resulting in a 48% and 42% increase on the baseline, respectively. It also corresponds to a 6% decrease in the overall administrative burden for businesses with respect to the standard scenario for this option.

The full results of the sensitivity analysis can be found in Annex E – Section E3.4.

Administrative burden for public bodies

As well as impacting businesses, the expansion of split payment to B2G also **impacts on the administrative burden of public bodies.** Unlike the SCM calculations for businesses, the cost for public bodies are not calculated by the size of the public body. It was deemed that such a granular approach would be too heavily reliant on assumptions. Therefore one set of cost for the average public body are presented (see Section 7.2.1 and Annex B - Section C.5.4 for more details on the definition of public bodies adopted).

The number of public bodies impacted by this option includes all public bodies included in the baseline (i.e. 74 500). The assumptions used for estimating the number of public bodies can be found in Annex B - Section C.5.4.

The table below presents the administrative burden costs for public bodies.

Table 36: Administrative burden costs for public bodies under Option 3

Information Obligation		Option 3		Baseline
		Total cost for all public bodies impacted	Total cost for 1 public body	
IO1	VAT registration	2.6 million	27	No VAT related costs for public bodies
IO2	Invoicing domestic	*Not relevant for public bodies*		
IO3	VAT Return	*Not relevant for public bodies*		
IO4	VAT payment	*Not relevant for public bodies*		
IO4a	Split Payment of VAT	506.1 million	5 350	
IO5	Split Payment Sales & Purchase List	91.1 million	963	
	Total	**599.8 million**	**6 340**	

Source: Deloitte estimates based on SCM analysis

The information obligations for public bodies are also different in comparison to those for businesses. In general, it is found that public bodies do not have to invoice, file a VAT return or pay VAT in the same way that businesses do. They therefore do not have to comply with the same obligations.

However, public bodies that are purchasing from businesses will also need to split the payment by paying the VAT directly to the relevant tax authority, as well as file a monthly split payment purchase list. As with businesses, the number of transactions a public body conducts ultimately establishes the magnitude of costs. Again, the number of transactions can vary substantially between different types and sizes of public bodies, and the different competencies they have in Member States. The average number of yearly transactions for the SCM analysis is estimated at 5 000.

In addition, to be able to start making VAT payments, such public bodies would need to be **identified for VAT purposes**, which implies a registration of some sort. However, as they would not have VAT deduction rights, this registration would need to differ from the usual VAT registration and would be significantly less burdensome than the registration for businesses. In addition, many Member States already have some form of registration and a unique identifier for public bodies for fiscal and taxation purposes. It is considered that the introduction of a split payment mechanism encompassing B2G transactions as well would require a minor adaptation of the current systems, rather than new ones, with consequent limited costs and efforts involved (see Annex B - for more details).

Public bodies are not expected to have the obligation to file a VAT return like businesses, since they would not be recovering input VAT. The monthly purchase list submitted to the tax authorities is deemed sufficient for checking the amount of VAT paid.

Sensitivity analysis on the number of transactions for public bodies

As with businesses, the cost of IO4a and IO5 are heavily dependent on the number of transactions conducted by the public body. The normal scenario assumes an average of 5 000 transactions per public body per year. However, sensitivities have been carried out around this number:

- **Upper bound:** When the number of transactions increases by 20% the cost for one public body is approximately **EUR 7 410,** and **EUR 701 billion** for all public bodies per year. It also corresponds to a 17% increase in the overall administrative burden for public bodies with respect to the standard scenario for this option.
- **Lower bound:** When the number of transactions decreases by 20%, the cost for one public body is approximately **EUR 5 270** and **EUR 498.5 billion** for all public bodies per year. It also corresponds to a 17% decrease in the overall administrative burden for public bodies with respect to the standard scenario for this option.

The full results of the sensitivity analysis can be found in Annex E – Section E3.4.

Overall administrative costs

Combining the costs for businesses and public bodies, the overall administrative costs for Option 3 amount to EUR 112.4 billion. This is a 52% increase on the baseline and accounts for approximately 0.77% of the EU GDP[145].

[145] Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.

7.5.5 Option 4 – Option 3 with extension of split payment to credit card and cash payments

Administrative burden for businesses

Option 4 extends split payment to apply to all transaction types (i.e. EFT, credit card, cash) in B2B, B2C and B2G transactions. The application of the split payment to Member States that choose not to apply a GRCM still applies also. The number of businesses impacted is estimated at 28 million.

The administrative burden for Option 4 increases the costs of the baseline by **63% per business**, and **57%** for all businesses in the EU per year.

Table 37: Administrative burden costs for businesses under Option 4

Information Obligation		Option 4		Baseline	
		Total cost for all businesses	**Cost for 1 business (EUR)**	**Total cost for all businesses (EUR)**	**Cost for 1 business (EUR)**
IO1	VAT registration	2.6 billion	94	2.7 billion	94
IO2	Invoicing (B2B)	22.9 billion	831	23.8 billion	831
	Invoicing (B2G)	990.5 million	142	*Not applicable in baseline*	
	Invoicing (B2B & B2G)	23.9 billion	973	23.8 billion	831
IO3	VAT Return	50.8 billion	1 843	47.4 billion	1 654
IO4	VAT payment	223.7 million	8	232.7 million	8
IO4a	Split Payment of VAT (B2B)	18.2 billion	661	*Not applicable in baseline*	
	Split Payment of VAT (B2G)	396.2 million	57		
	Split Payment of VAT (B2B & B2G)	18.6 billion	718	*Not applicable in baseline*	
IO5	Split Payment Sales & Purchase List	20.3 billion	738	*Not applicable in baseline*	
Total		**116.4 billion**	****Lower 4 174 Middle 4 225 Upper 4 374**	**74.2 billion**	**2 584**

Source: Deloitte estimates based on SCM analysis
**Does not apply to all businesses*
*** Lower = cost for businesses that do not have any transactions with public bodies (i.e. only B2B); Upper = cost for businesses that have transactions with businesses and public bodies (B2B & B2G); Middle = weighted average cost across all businesses.*

The main driver of the increase in costs is the application of split payment to broader types of transactions. This is likely to increase the volume of transactions subject to split payment and the complexity of VAT administration for businesses overall. As explained in Option 3, in B2C transactions, the supplier will have to perform daily reconciliation and payment of the split VAT amount to the tax authority. The additional complexity also translates into increased time for the VAT return, however this is not the most substantial cost.

Sensitivity analysis on the number of transactions for businesses

The results of sensitivity analysis for Option 4 for the upper and lower bound is as follows:

- **Upper bound:** When the number of transactions increases by 20% the cost for one business is approximately **EUR 4 500,** and **EUR 120.8 billion** for all businesses per year, resulting in a 70% and 63% increase on the baseline, respectively. It also corresponds to a 4% increase in the overall administrative burden for businesses with respect to the standard scenario for this option.
- **Lower bound:** When the number of transactions decreases by 20%, the cost for one business is approximately **EUR 4 000** and **EUR 109 billion** for all businesses per year, resulting in a 53% and 46% increase on the baseline, respectively. It also corresponds to a 6% decrease in the overall administrative burden for businesses with respect to the standard scenario for this option.

The full results of the sensitivity analysis can be found in Annex E – Section E3.5.

Administrative burden for public bodies

As with Option 3, the expansion of split payment to B2G also **impacts on the administrative burden of public bodies**. The impact on the administrative burden of public bodies is not expected to change in Option 4. Therefore the same costs as Option 3 apply (see above, Table 36).

Overall administrative costs

Combining the costs for businesses and public bodies, the overall administrative costs for Option 4 amount to EUR 117 billion. This is a 58% increase on the baseline and accounts for approximately 0.801% of the EU GDP[146].

7.5.6 Option 5 - Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)

Option 5 operates in the definitive regime and involves a split payment mechanism on B2B EFT transactions (as in Option 1 under the current VAT regime).

As mentioned previously and explained in the methodology, options under the definitive regime do not affect the number of businesses impacted but the number of transactions liable for split payment (see Section 7.4.6).

In the definitive regime, split payment would apply to domestic transactions and also to cross-border transactions with non-certified taxable persons (CTP). For the purposes of the assessment, the number of non-certified taxable persons in the EU is assumed in a first scenario to be around 30% of all VAT registered businesses (scenario 1, i.e. 70% of cross-border transactions are carried out by CTPs, see Section 7.4.6). We therefore assume that 30% of cross-border transactions are conducted with non-certified taxable persons. For the

[146] Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.

administrative burden, this means that the costs increase because split payment applies both to domestic B2B EFT transactions and to intra-EU transactions with non-certified taxable persons.

Given the uncertainty on the forthcoming proposals on the VAT definitive regime, a higher number of CTPs is also considered in a second scenario 2, where 95% of cross-border transactions are carried out by CTPs (see Section 7.4.6).

The SCM results in the definitive regime are therefore presented in two scenarios:

1. 70% of cross-border transactions are carried out by CTPs
2. 95% of cross-border transactions are carried out by CTPs

Scenario 1: 70% of cross-border transactions are carried out by CTPs

The results of the SCM, presented in the table below, show that Option 5 (Scenario 1) increases costs for an **individual business and for all businesses in the EU by 46% respectively** compared to the baseline.

Table 38: Administrative burden costs for businesses under Option 5 (Scenario 1)

Information Obligation		Option 5 (Scenario 1)		Baseline	
		Total cost for all businesses (EUR)	Cost for 1 business (EUR)	Total cost for all businesses (EUR)	Cost for 1 business (EUR)
IO1	VAT registration	2.7 billion	94	2.7 billion	94
IO2	Invoicing (domestic)	23.8 billion	831	23.8 billion	831
	Invoicing (Cross border)	2.4 billion	83	*Not applicable in baseline*	
	Invoicing (Total)	262 billion	914	23.8 billion	831
IO3	VAT Return (domestic)	51.2 billion	1 784	47.4 billion	1 654
IO4	VAT payment (domestic)	232.7 million	8	232.7 million	8
IO4a	Split Payment of VAT	8.9 billion	454	*Not applicable in baseline*	
IO5	Split Payment Sales/Purchase List	18.9 billion	657	*Not applicable in baseline*	
	Total	**108.1 billion**	**3 766**	**74.2 billion**	**2 584**

Source: Deloitte estimates based on SCM analysis

Compared to the options in the normal regime (i.e. options 1 – 4), the split payment mechanism applies to cross border transactions – thus the costs for invoicing are differentiated by domestic and cross-border.

Sensitivity analysis on the number of transactions for businesses

The results of sensitivity analysis for Option 5 (scenario 1) for the upper and lower bound is as follows:

- **Upper bound:** When the number of transactions increases by 20% the cost for one business is approximately **EUR 4 000,** and **EUR 115.1 billion** for all businesses per year, resulting in a 55% increase on the baseline, respectively. It also corresponds to a 6% increase in the overall administrative burden for businesses with respect to the standard scenario for this option.
- **Lower bound:** When the number of transactions decreases by 20%, the cost for one business is approximately **EUR 3 500** and **EUR 101 billion** for all businesses per year, resulting in a 36% increase on the baseline, respectively. It also corresponds to a 7% decrease in the overall administrative burden for businesses with respect to the standard scenario for this option.

The full results of the sensitivity analysis can be found in Annex E – Section E3.6.

Scenario 2: 95% of cross-border transactions are carried out by CTPs

When 95% of cross-border transactions are carried out by CTPs this means that only 5% of cross-border transactions would be subject to split payment.

The results of the SCM are presented in the table below which show that Option 5 Scenario 2 increases costs for an individual business and all businesses in the EU by **45% respectively.**

Table 39: Administrative burden costs for businesses under Option 5 (Scenario 2)

Information Obligation		Option 5 (Scenario 2)		Baseline	
		Total cost for all businesses (EUR)	Cost for 1 business (EUR)	Total cost for all businesses (EUR)	Cost for 1 business (EUR)
IO1	VAT registration	2.7 billion	94	2.7 billion	94
IO2	Invoicing (domestic)	23.8 billion	831	23.8 billion	831
	Invoicing (Cross border)	2.4 billion	83	*Not applicable in the baseline*	
	Invoicing (Total)	26.2 billion	914	23.8 billion	831
IO3	VAT Return (domestic)	51.2 billion	1 784	47.4 billion	1 654
IO4	VAT payment (domestic)	232.7 million	8	232.7 million	8
IO4a	Split Payment of VAT	8.6 billion	301	*Not applicable in the baseline*	
IO5	Split Payment Sales & Purchase List	18.9 billion	657	*Not applicable in the baseline*	
	Total	**107.8 billion**	**3 757**	**74.2 billion**	**2 584**

Source: Deloitte estimates based on SCM analysis

Compared to scenario 1, the cost for individual businesses and businesses overall, although lower, are not significantly different. The only difference between the two scenarios is the number of transactions that would be subject to split payment. i.e. IO4a.

Sensitivity analysis on the number of transactions for businesses

The results of sensitivity analysis for Option 5 (Scenario 2) for the upper and lower bound is as follows:

- **Upper bound:** When the number of transactions increases by 20% the cost for one business is approximately **EUR 4 000,** and **EUR 114.8 billion** for all businesses per year, resulting in a 55% increase on the baseline, respectively. It also corresponds to a 6% increase in the overall administrative burden for businesses with respect to the standard scenario for this option.
- **Lower bound:** When the number of transactions decreases by 20%, the cost for one business is approximately **EUR 3 500** and **EUR 100.9 billion** for all businesses per year, resulting in a 36% increase on the baseline, respectively. It also corresponds to a 6% decrease in the overall administrative burden for businesses with respect to standard scenario for this option.

The full results of the sensitivity analysis can be found in Annex E – Section E3.6.

Overall administrative costs

Public bodies are not impacted by Option 5 and therefore bear no costs. The overall administrative costs for Option 5 (scenario 1) amount to EUR 108.1 billion. This is a 46% increase on the baseline and accounts for approximately 0.740% of the EU GDP[147].

The overall administrative costs for Option 5 (scenario 2) amount to EUR 107.9 billion. This is a 45% increase on the baseline and accounts for approximately 0.739% of the EU GDP[148].

7.5.7 Option 6 - Option 5 with extension of split payment on EFT to B2C and B2G

Option 6 also operates within the definitive VAT regime and involves the introduction of a split payment system for B2B, B2C and B2G, EFT transactions. Since this is the same mechanism as in Option 3, the costs are similar but slightly higher since (as explained in Section 7.5.6) split payment applies also to intra-EU transactions with non-certified taxable persons (whereby B2G public bodies are by definition non-CTPs). The costs per each scenario are explained below.

[147] Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.
[148] Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.

Administrative burden for businesses – Scenario 1

The overall costs for the administrative burden of option 6 (scenario 1) are presented in the table below and amount to an increase of **61%** and for all business in the EU compared to the baseline.

Table 40: Administrative burden costs for businesses under Option 6 (Scenario 1)

Information Obligation		Option 6 (Scenario 1)		Baseline	
		Total cost for all businesses (EUR)	Cost for 1 business (EUR)	Total cost for all businesses (EUR)	Cost for 1 business (EUR)
IO1	VAT registration	2.7 billion	94	2.7 billion	94
IO2	Invoicing domestic (B2B)	23.8 billion	831	23.8 billion	831
	Invoicing domestic (B2G)*	1 billion	142	*Not applicable in the baseline*	
	Invoicing cross border (B2B)	2.4 billion	83	*Not applicable in the baseline*	
	TOTAL invoicing	27.3 billion	1 056	23.8 billion	831
IO3	VAT Return (domestic)	51.2 billion	1 784	47.4 billion	1 654
IO4	VAT payment (domestic)	232.7 million	8	232.7 million	8
IO4a	Split Payment of VAT (B2B)	18.4 billion	641	*Not applicable in the baseline*	
	Split Payment of VAT (B2G)*	413.5 million	57	*Not applicable in the baseline*	
	Split Payment of VAT (B2B & B2G)	18.8 billion	698		
IO5	Split Payment Sales & Purchase List	18.9 billion	657	*Not applicable in the baseline*	
	Total	**119.2 billion**	****Lower:4 097 Middle: 4 153 Upper: 4 297**	**74.2 billion**	**2 584**

Source: Deloitte estimates based on SCM analysis
**Does not apply to all businesses*
*** Lower = cost for businesses that do not have any transactions with public bodies (i.e. only B2B); Upper = cost for businesses that have transactions with businesses and bodies (B2B & B2G); Middle = weighted average cost across all businesses.*

As in Option 5, invoicing for both cross-border and domestic transactions is included in the split payment regime. Further, domestic B2G transactions are impacted by this option, thus increasing the cost more. A number of assumptions for the amount of domestic B2G invoices per turnover bracket is presented in Annex C – Sections C.12.3 and C.12.4.

Sensitivity analysis on the number of transactions for businesses

The results of sensitivity analysis for Option 6 (Scenario 1) for the upper and lower bound is as follows:

- **Upper bound:** When the number of transactions increases by 20% the cost for one business is approximately **EUR 4 400,** and **EUR 125.5 billion** for all businesses per year, resulting in a 69% increase on the baseline, respectively. It also corresponds to a 5% increase in the overall administrative burden for businesses with respect to the standard scenario for this option.
- **Lower bound:** When the number of transactions decreases by 20%, the cost for one business is approximately **EUR 3 900** and **EUR 112.1 billion** for all businesses per year, resulting in a 51% increase on the baseline, respectively. It also corresponds to a 6% decrease in the overall administrative burden for businesses with respect to the standard scenario for this option.

The full results of the sensitivity analysis can be found in Annex E – Section E3.7.

Administrative burden for businesses – Scenario 2

When 95% of cross-border transactions are carried out by CTPs this means that only 5% of cross-border transactions would be subject to split payment.

The results of the SCM are presented in the table below which show that Option 6 Scenario 2 increases costs to an increase of **60%** per business per year and for all business in the EU compared to the baseline.

Table 41: Administrative burden costs for businesses under Option 6 (Scenario 2)

Information Obligation		Option 6 (Scenario 1)		Baseline	
		Total cost for all businesses (EUR)	Cost for 1 business (EUR)	Total cost for all businesses (EUR)	Cost for 1 business (EUR)
IO1	VAT registration	2.7 billion	94	2.7 billion	94
IO2	Invoicing domestic (B2B)	23.8 billion	831	23.8 billion	831
	Invoicing domestic (B2G)*	1 billion	142	*Not applicable in the baseline*	
	Invoicing cross border (B2B)	2.4 billion	83	*Not applicable in the baseline*	
	TOTAL invoicing	27.3 billion	1 056	23.8 billion	831
IO3	VAT Return (domestic)	51.2 billion	1 784	47.4 billion	1 654
IO4	**VAT payment (domestic)**	232.7 million	8	232.7 million	8
IO4a	**Split Payment of VAT (B2B)**	18.2 billion	632	*Not applicable in the baseline*	
	Split Payment of VAT (B2G)*	413.5 million	57	*Not applicable in the baseline*	
	Split Payment of VAT (B2B & B2G)	18.6 billion	689		
IO5	**Split Payment Sales & Purchase List**	18.9 billion	657	*Not applicable in the baseline*	
	Total	**118.8 billion**	****Lower: 4 089 Middle: 4 139 Upper: 4 288**	**74.2 billion**	**2 584**

Source: Deloitte estimates based on SCM analysis
**Does not apply to all businesses*
*** Lower = cost for businesses that do not have any transactions with public bodies (i.e. only B2B); Upper = cost for businesses that have transactions with businesses and bodies (B2B & B2G); Middle = weighted average cost across all businesses.*

Compared to scenario 1, the cost for individual businesses and businesses overall, although lower, are not significantly different. The only difference between the two scenarios is the number of transactions that would be subject to split payment. i.e. IO4a.

Sensitivity analysis on the number of transactions for businesses

The results of sensitivity analysis for Option 6 (scenario 2) for the upper and lower bound is as follows:

- **Upper bound:** When the number of transactions increases by 20% the cost for one business is approximately **EUR 4 400,** and **EUR 126 billion** for all businesses per year, resulting in a 70% increase on the baseline, respectively. It also corresponds to a 6% increase in the overall administrative burden for businesses with respect to the standard scenario for this option.
- **Lower bound:** When the number of transactions decreases by 20%, the cost for one business is approximately **EUR 3 900** and **EUR 112.5 billion** for all businesses per year, resulting in a 52% increase on the baseline, respectively. It also corresponds to a 5% decrease in the overall administrative burden for businesses with respect to the standard scenario for this option.

The full results of the sensitivity analysis can be found in Annex E – Section E3.7.

Administrative burden for public bodies

Public bodies are also impacted by this option (see Section 7.2.1 and Annex B - Section C.5.4 for more details on the definition of public bodies adopted). However the costs due to the administrative burden are the same as those in Option 3 (see Table 36 in Section 7.5.4 above), Under the definitive regime options, public bodies are considered as non-certified taxable persons for the purpose of calculations. However since rules on domestic supplies would not be changed, and it is assumed that public bodies do not have a significant number of cross-border transactions, there are no additional costs for them under the definitive regime.

Overall administrative costs

Combining the costs for businesses and public bodies, the overall administrative costs for Option 6 amount to EUR 119.8 billion in Scenario 1. This is a 61% increase on the baseline and accounts for approximately 0.82% of the EU GDP[149].

[149] Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.

For scenario 2, the overall administrative costs amount to 119.4 billion. This is a 61% increase on the baseline and accounts for approximately 0.818% of the EU GDP[150].

7.5.8 Option 7 - Option 6 with extension of split payment to credit card and cash payments

Option 7, operating also in the definitive VAT regime, introduces a split payment mechanism for all payment types of transactions in B2B, B2C and B2G. Like the other options under the definitive regime, this option has a similar, but slightly higher impact on the administrative burden of businesses and public bodies than its counterpart in the normal regime (i.e. Option 4), as it also applies to cross-border transactions not carried out by CTP.

Administrative burden for businesses – Scenario 1

The overall costs for the administrative burden of option 7 (Scenario 1) are presented in the table below and amount to an increase of **67%** per business per year and for all business in the EU compared to the baseline.

Table 42: Administrative burden costs for businesses under Option 7 (Scenario 1)

Information Obligation		Option 7 (Scenario 1)		Baseline	
		Total cost for all businesses (EUR)	Cost for 1 business (EUR)	Total cost for all businesses (EUR)	Cost for 1 business (EUR)
IO1	VAT registration	2.7 billion	94	2.7 billion	94
IO2	Invoicing domestic (B2B)	23.8 billion	831	23.8 billion	831
	Invoicing domestic (B2G)*	1 billion	142	*Not applicable in the baseline*	
	Invoicing cross border (B2B)	2.4 billion	83	*Not applicable in the baseline*	
	TOTAL invoicing	27.3 billion	1 056	23.8 billion	831
IO3	VAT Return (domestic)	52.9 billion	1 841	47.4 billion	1 654
IO4	VAT payment (domestic)	232.7 million	8	232.7 million	8
IO4a	Split Payment of VAT (B2B)	19.2 billion	667	*Not applicable in the baseline*	
	Split Payment of VAT (B2G)*	413.5 million	57	*Not applicable in the baseline*	
	Split Payment of VAT (B2B & B2G)	19.6 billion	724		
IO5	Split Payment Sales & Purchase List	21.1 billion	736	*Not applicable in the baseline*	
	Total	**123.7 billion**	****Lower 4 261**	**74.2 billion**	**2 584**

[150] Ibid.

Information Obligation		Option 7 (Scenario 1)		Baseline	
		Total cost for all businesses (EUR)	Cost for 1 business (EUR)	Total cost for all businesses (EUR)	Cost for 1 business (EUR)
			Middle: 4 311 Upper: 4 460		

Source: Deloitte estimates based on SCM analysis

**Does not apply to all businesses*

*** Lower = cost for businesses that do not have any transactions with public bodies (i.e. only B2B); Upper = cost for businesses that have transactions with businesses and bodies (B2B & B2G); Middle = weighted average cost across all businesses.*

As in option 5, invoicing for both cross-border and domestic transactions is included in the split payment regime. Further, B2G transactions are impacted by this option, thus increasing the cost more. A number of assumptions for the amount of domestic B2G invoices per turnover bracket is presented in Annex C – Sections C.12.3 and C.12.4.

Sensitivity analysis on the number of transactions for businesses

The results of sensitivity analysis for Option 7 (scenario 1) for the upper and lower bound is as follows:

- **Upper bound:** When the number of transactions increases by 20% the cost for one business is approximately **EUR 4 600,** and **EUR 131.3 billion** for all businesses per year, resulting in a 77% increase on the baseline, respectively. It also corresponds to a 6% increase in the overall administrative burden for businesses with respect to the standard scenario for this option.
- **Lower bound:** When the number of transactions decreases by 20%, the cost for one business is approximately **EUR 4 000** and **EUR 117.4 billion** for all businesses per year, resulting in a 58% increase on the baseline, respectively. It also corresponds to a 5% decrease in the overall administrative burden for businesses with respect to the standard scenario for this option.

The full results of the sensitivity analysis can be found in Annex E – Section E3.8.

Administrative burden for businesses – Scenario 2

When 95% of cross-border transactions are carried out by CTPs this means that only 5% of cross-border transactions would be subject to split payment.

The results of the SCM are presented in the table below which show that Option 6 Scenario 2 increases costs to an increase of **66%** per business per year and for all business in the EU compared to the baseline.

Table 43: Administrative burden costs for businesses under Option 7 (Scenario 2)

Information Obligation		Option 7 (Scenario 1)		Baseline	
		Total cost for all businesses (EUR)	Cost for 1 business (EUR)	Total cost for all businesses (EUR)	Cost for 1 business (EUR)
IO1	VAT registration	2.7 billion	94	2.7 billion	94
IO2	Invoicing domestic (B2B)	23.8 billion	831	23.8 billion	831
	Invoicing domestic (B2G)*	1 billion	142	*Not applicable in the baseline*	
	Invoicing cross border (B2B)	2.4 billion	83	*Not applicable in the baseline*	
	TOTAL invoicing	27.3 billion	1 056	23.8 billion	831
IO3	VAT Return (domestic)	52.9 billion	1 841	47.4 billion	1 654
IO4	VAT payment (domestic)	232.7 million	8	232.7 million	8
IO4a	Split Payment of VAT (B2B)	18.9 billion	659	*Not applicable in the baseline*	
	Split Payment of VAT (B2G)*	413.5 million	57	*Not applicable in the baseline*	
	Split Payment of VAT (B2B & B2G)	19.3 billion	716		
IO5	Split Payment Sales & Purchase List	21.1 billion	736	*Not applicable in the baseline*	
	Total	**123.5 billion**	****Lower 4 252 Middle: 4 303 Upper: 4 452**	**74.2 billion**	**2 584**

Source: Deloitte estimates based on SCM analysis
**Does not apply to all businesses*
*** Lower = cost for businesses that do not have any transactions with public bodies (i.e. only B2B); Upper = cost for businesses that have transactions with businesses and bodies (B2B & B2G); Middle = weighted average cost across all businesses.*

Compared to scenario 1, the cost for individual businesses and businesses overall, although lower, are not significantly different. The only difference between the two scenarios is the number of transactions that would be subject to split payment. i.e. IO4a.

Sensitivity analysis on the number of transactions for businesses

The results of sensitivity analysis for Option 7 (Scenario 2) for the upper and lower bound is as follows:

- **Upper bound:** When the number of transactions increases by 20% the cost for one business is approximately **EUR 4 600,** and **EUR 131 billion** for all businesses per year, resulting in a 77% increase on the baseline, respectively. It also corresponds to a 6% increase in the overall administrative burden for businesses with respect to the standard scenario for this option.

- **Lower bound:** When the number of transactions decreases by 20%, the cost for one business is approximately **EUR 4 000** and **EUR 117.1 billion** for all businesses per year, resulting in a 58% increase on the baseline, respectively. It also corresponds to a 5% decrease in the overall administrative burden for businesses with respect to the standard scenario for this option.

The full results of the sensitivity analysis can be found in Annex E – Section E3.8.

Administrative burden for public bodies

Public bodies are also impacted by this option ((see Section 7.2.1 and Annex B - Section C.5.4 for more details on the definition of public bodies adopted). However the costs due to the administrative burden are the same as those in Option 3 (see Table 36 in Section 7.5.4 above). Under the definitive regime options, public bodies are considered as non-certified taxable persons for the purpose of calculations. However since rules on domestic supplies would not be changed, and it is assumed that public bodies do not have a significant number of cross-border transactions, there are no additional costs for them under the definitive regime.

Overall administrative costs

Combining the costs for businesses and public bodies, the overall administrative costs for Option 7 amount to EUR 124.3 billion in Scenario 1. This is a 68% increase on the baseline and accounts for approximately 0.852%of the EU GDP[151].

For scenario 2, the overall administrative costs amount to 124.1 billion. This is a 67% increase on the baseline and accounts for approximately 0.850% of the EU GDP[152].

7.5.9 Overview of impacts on the administrative burden

The results of the SCM analysis indicate that substantial costs are expected across all options with the introduction of a split payment mechanism.

The incremental costs of the VAT information obligations per option range from **27% - 67%** depending on the scope of the application of the split payment mechanism. It is reasonable that the options with a smaller scope of the application of the mechanism are less costly to businesses.

As explained throughout the options, the administrative costs are highly dependent on the number of transactions conducted by a business. There are significant difficulties in establishing an average number of transactions for all VAT-registered businesses across the EU and assumptions applied to these figures are to be **treated with caution**. Nevertheless,

[151] Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.
[152] Ibid.

the volume of transactions was applied consistently across all options and thus the incremental costs are found to be reasonable based on the design of the options.

It should be noted that these costs could be reduced by increased automation of business processes (i.e. e-invoicing and automatic splitting of payments) as well as services provided by tax authorities (i.e. pre-filled VAT returns). However these elements were not considered in the option design, which is not based on a specific IT architecture.

The table below provides an overview of the administrative burden estimated for businesses and tax authorities across the different policy options.

Table 44: Overview of administrative costs for all options

Option	Cost for 1 business (EUR)	Cost for all businesses impacted (EUR)	Cost for 1 public body (EUR)	Cost for all public bodies impacted (EUR)	Overall administrative costs (businesses & public bodies) (EUR)	Overall administrative costs (as % of GDP[153])
Baseline	2 584	74.2 billion	N/A	N/A	74.2 billion	0.508%
Option 1	3 428	98.4	N/A	N/A	98.4 billion	0.674%
% change wrt baseline	33%	33%			33%	
Option 1(b)	3 487	100.1 billion	N/A	N/A	100.1 billion	0.686%
% change wrt baseline	35%	35%			35%	
Option 2	3 431	94.5 billion	N/A	N/A	94.5 billion	0.647%
% change wrt baseline	33%	27%			27%	
Option 3	4 061	111.8 billion	6 340	599.8 million	112.4 billion	0.770%
% change wrt baseline	57%	51%			52%	
Option 4	4 225	116.4 billion	6 340	599.8 million	117 billion	0.801%
% change wrt baseline	63%	57%			58%	
Option 5	3 766	108.1 billion	N/A	N/A	108.1 billion	0.740%
% change wrt baseline	46%	46%	N/A	N/A	46%	
Option 6	4 153	119.2 billion	6 340	599.8 million	119.8 billion	0.821%
% change wrt baseline	61%	61%			61%	
Option 7	4 311	123.7 billion	6 340	599.8 million	120.3 billion	0.852%
% change wrt baseline	67%	67%			68%	

Source: Deloitte estimates based on SCM analysis

153 Based on EU GDP of 2015: EUR 14 600 billion, source: https://europa.eu/european-union/about-eu/figures/economy_en.

7.6 Costs of implementation

The notion of costs of implementation refers to the estimated costs for businesses (including public bodies) and tax authorities in implementing the split payment mechanism. Since the split payment mechanism would be implemented by all VAT-registered businesses regardless of the scope of application of the mechanism, the cost of implementation is assumed to be the same for each option.

The main costs identified for businesses and public bodies in implementing the split payment mechanism are:

1. Adaptation to ERP/accounting systems
2. Training

In addition, there are costs associated with the increase in financial transactions due to split payment. Further, tax authorities may incur costs for adjustments to their internal processes and systems.

As a general remark, the design of the policy options in this study does not rest on a specific IT architecture. Therefore the implementation costs estimated are notably lower than those assessed by the 2010 study[154], which included a clearing house and full automation.

7.6.1 Cost of adapting ERP/accounting system

In interviews with businesses and experts in the field, it was confirmed that almost all businesses use some technical system or software for their day-to-day bookkeeping and account. Since the split payment mechanism introduces changes to VAT-related administrative tasks, these management systems would certainly have to be adjusted to comply with new processes.

The systems and software on offer to businesses vary substantially and businesses often customise the systems to suit their own needs. Attempting to quantify the average costs of changes to such systems is therefore fruitless. Through desk research and consultation with experts in ERP systems, the costs for a "standard" ERP/accounting package were established at approximately **EUR 2 000**, with variations depending on the size of the businesses and related complexity and number of running systems. This is regarded as a one-off cost and the system would then run 'as usual', so that any update/maintenance costs would not be dissimilar from those encountered in absence of split payment mechanism.

7.6.2 Cost of training

To become familiar with the new system of split payment, it is expected that accountancy and taxation professionals would follow a training in order to gain a better understanding of the scope of the policy option introduced and of the implications for its practical implementation

[154] PriceWatherhouseCooper (2010), Ibid.

within the business or the public body. One training per business or public body is estimated at about EUR 500 (up to EUR 1 000).

7.6.3 Additional costs related to split payment

Financial transaction costs

The split payment mechanism essentially doubles the amount of financial transactions per transaction that it applies to (except in the case of B2C). The overall number of financial transactions will thus increase throughout the EU. The cost of a financial transaction varies substantially across Member States and banks and so estimation of such costs is not possible without a large set of assumptions with high uncertainty. The following table provides an indication of some bank costs per transaction (found via desk research):

Table 45 – Overview of bank costs per transaction

Bank	Type of transaction	Cost
ING (Belgium)	SEPA Direct Debit	EUR 0.05 [155]
Bank of Ireland	SEPA Direct Debit (business account)	EUR 0.10[156]
NatWest (UK)	Automated Payment (in & out) (business account)	GBP 0.35[157]

Source: Deloitte analysis

The above costs are based on different client offers and information on bank transaction costs are only provided by a small number of banks and to a varying extents.

Tax Authority Costs

The costs for tax authorities also depend on the number of payments they are receiving on a daily basis from taxable persons. Although tax authority systems may require an upgrade to handle very large volumes of transactions, the mechanics of the system do not require any significant adjustments.

Automation

The current design of the options does not include any particular degree of automation in the VAT system. There is the potential to reduce administrative burden costs with the implementation of e-invoicing or automation of the split payment sales and purchase lists. If automation did accompany the system then costs for implementation would be significantly higher, while it would lower the recurring costs and the administrative burden.

155 https://www.ing.be/static/legacy/SiteCollectionDocuments/TariefInternationaleBetalingenWisselverrichtingenEN.pdf, p. 4.
156 https://businessbanking.bankofireland.com/fs/doc/wysiwyg/bca-fees-and-charges-jan-16.pdf, p. 6.
157 https://www.business.natwest.com/content/dam/natwest_com/Business%20and%20Content/downloads/Current-Accounts/Charges/Updated/New/NWB7829.pdf

7.7 Overall Cost-Benefit analysis (CBA)

The objective of this part of the study is to make a quantitative assessment of the costs and benefits associated with the different policy options discussed previously, regardless of which stakeholders will ultimately bear the burden or see the benefits. The CBA takes into account the costs and benefits of each of the policy options over the defined timeframe of the investment, which are discounted at the long-term cost of capital in order to first calculate and then compare the Net Present Value (NPV) of each option.

As mentioned, the time frame considered for the CBA is ten years, starting from 2020, when it is assumed that for all options, all legislation and implementation will be agreed and complete (see Annex B – Section B.2.2)

The CBA results for options 5-7 are based on CTP = 70%, which is the baseline scenario in this study (Scenario 1 – see Section 7.4.6).

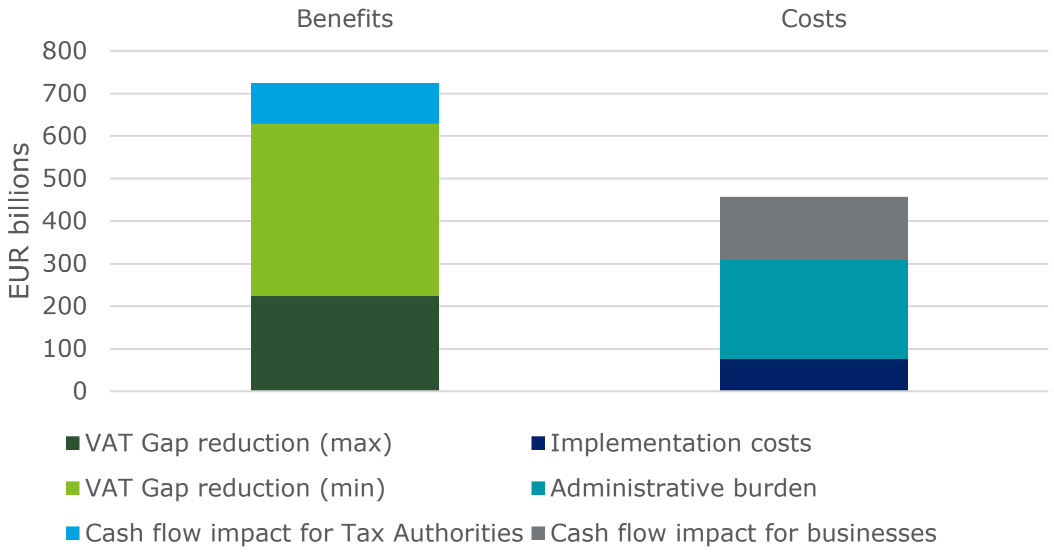
The results of the cost benefit analysis for each of the options are presented below.

7.7.1 Option 1 - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)

The total NPV of the implementation and operational costs between the timeframe 2020-2029 is EUR -456.21 billion. The total NPV of the benefits, as a result of a reduction in the VAT gap and a positive cash flow benefit to tax authorities is between EUR 499.8 billion and EUR 724.0 billion. Under the upper bound scenario, where the maximum VAT gap reduction occurs, the overall NPV over the ten year period is estimated to be EUR 267.74 billion.

The following figure shows the overall NPV of the costs and benefits for policy option 1.

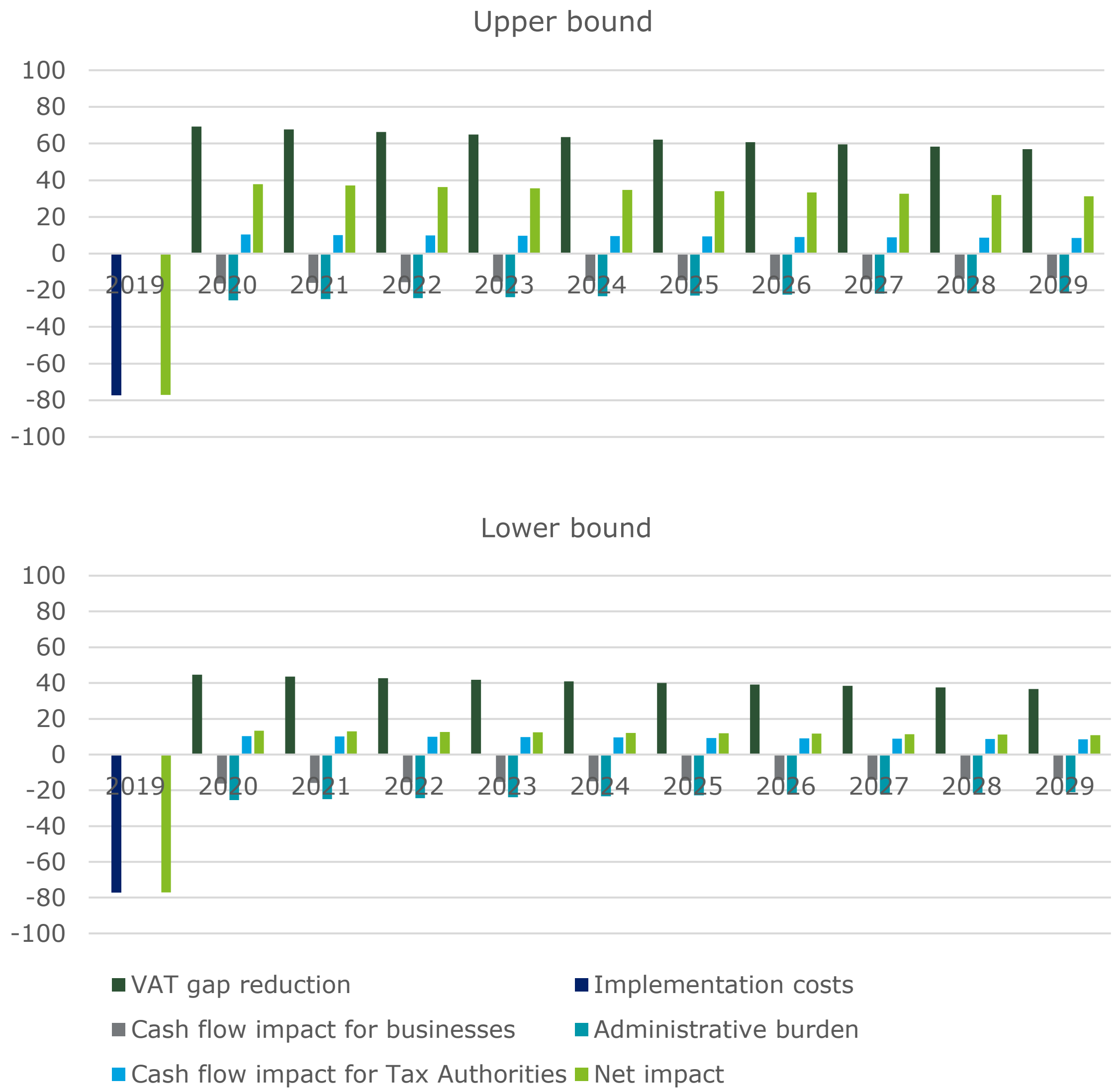
Figure 31: Total NPV of costs and benefits for policy option 1 (2020-2019)



Source: Deloitte analysis

The annual costs and benefits are also calculated over the time period for each of the options considered. The following graph shows both the yearly costs and benefits over the chosen timeframe under policy option 1.

Figure 32: Overview of the annual costs and benefits for policy option 1 (2020-2019)



Source: Deloitte analysis

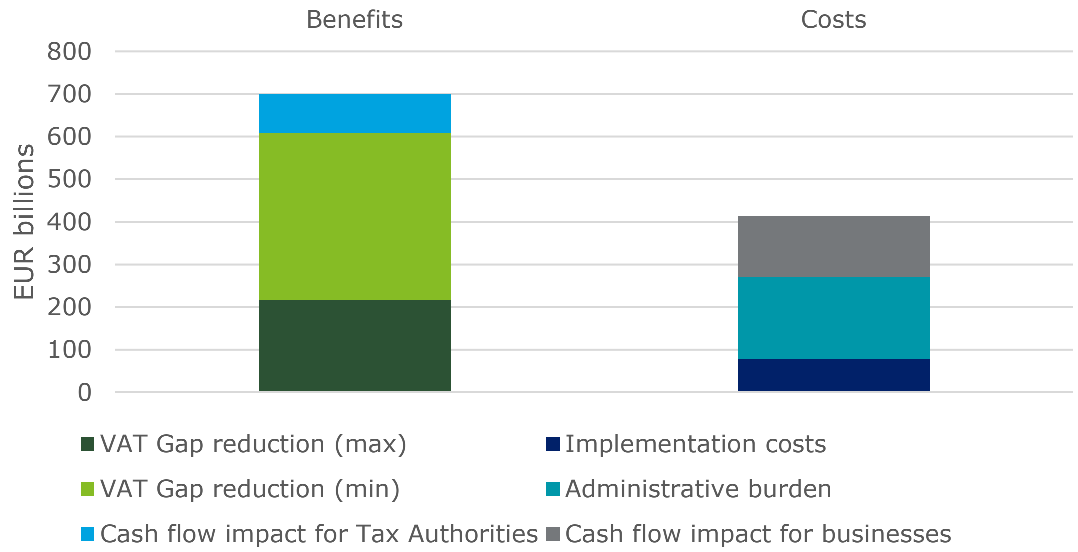
The annual benefits are greater than the annual costs year on year and as a result the yearly net impact is positive. Under the upper bound scenario the net impact, ranging from EUR 37.94 billion (2020) to EUR 31.22billion (2029), is mostly attributed to the VAT Gap reduction associated with the policy option. The reduction in the VAT Gap, accounts for between 81-87% of total benefits, while the remaining 13-19% is made up from the increased cash flow to tax authorities as a result of option 1. In comparison, the total administrative costs account for 51% of the total costs, whereas the negative cash flow impact to businesses only accounts for 32%. Implementation costs, which are calculated as a one off payment in 2019, account for 17% of total costs over the ten year period.

7.7.2 Option 2 - Option 1 combined with a generalised reverse charge mechanism in certain Member States

The total NPV of the implementation and operational costs under option 2 is EUR –413.92 billion. The NPV of the benefits, as a result of the introduction of policy option 2 is between EUR 483.5 billion and EUR 700.0 billion. As a result, the overall NPV over the ten year period is estimated to be between EUR 69.6 billion and EUR 286.1 billion. Likewise with option 1, the positive NPV seen under policy option 2 is driven by the implied reduction in the VAT Gap resulting from with the implementation of a split payment mechanism under policy option 2.

The following figure shows the overall NPV of the costs and benefits for option 2.

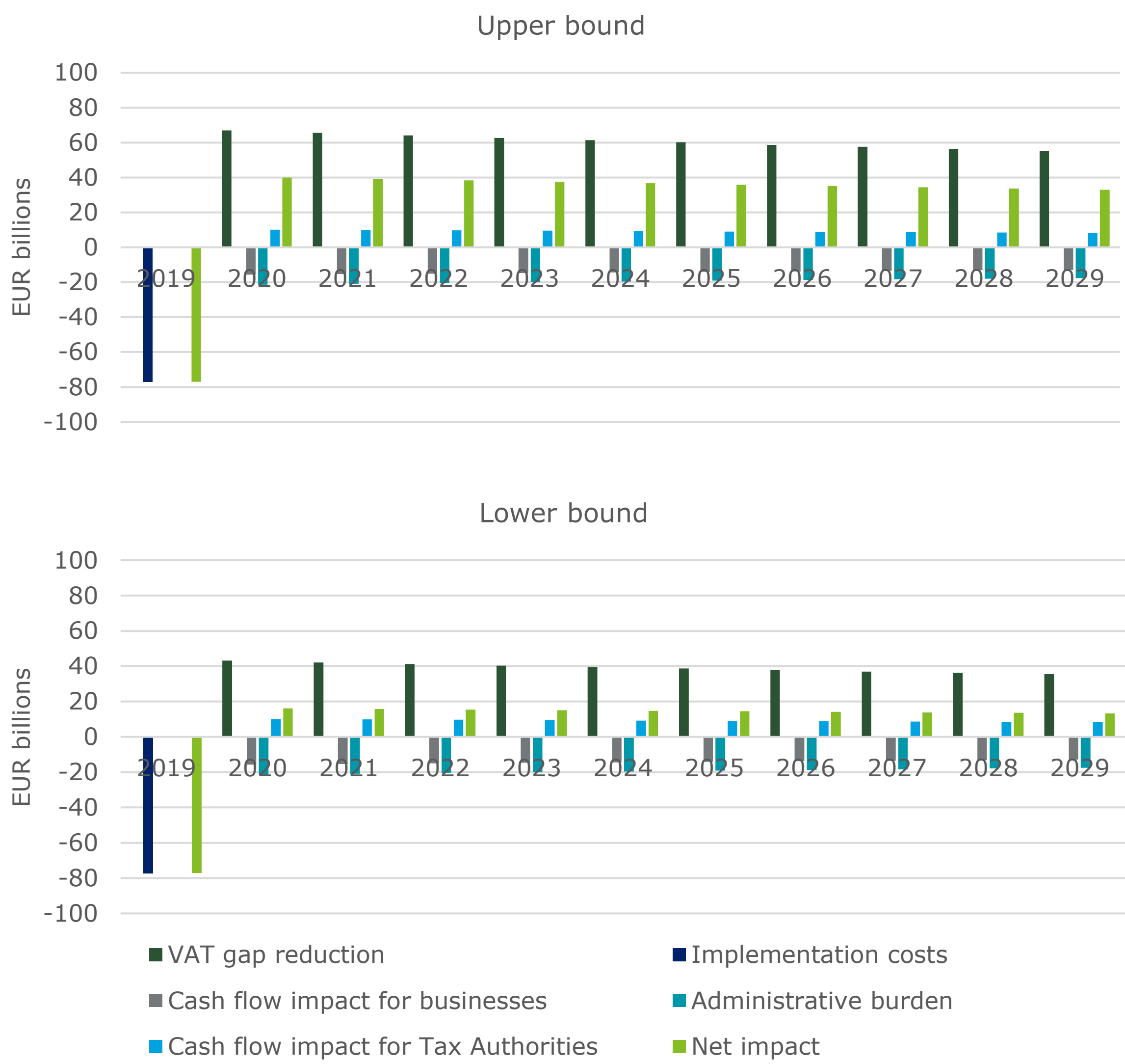
Figure 33: Total NPV of costs and benefits for policy option 2 (2020-2029)



Source: Deloitte analysis

The annual costs and benefits are also calculated over the time period for each of the options considered. The following graph shows the yearly costs and benefits over the chosen timeframe under option 2.

Figure 34: Overview of the annual costs anf benefits for policy option 2 (2020-2019)



Source: Deloitte analysis

The estimated annual benefits are greater than the annual costs realised each year under policy option 2 and as such the yearly net impact is positive, ranging from EUR 39.96 billion (2020) to EUR 32.88 billion (2029, under the upper bound scenario). The majority of the benefits are contributed by the reduction in the VAT Gap, accounting for between 81-87% of total benefits. The remaining 13-19% of benefits is made up from the increased cash flow to tax authorities as a result of the introduction of a split payment mechanism under policy option 2. In contrast, the majority of total costs is attributed for by the yearly business administrative costs, which accounts for 47% of the total costs. The remaining 53% of total costs is made up by the negative cash flow impact to businesses (35%) and a one off implementation cost (19%)[158].

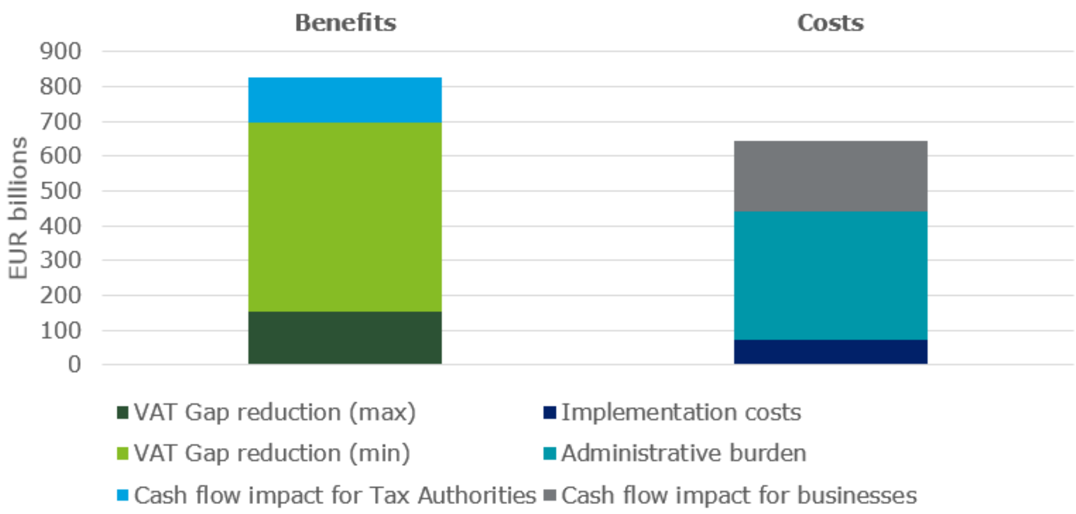
[158] Note: Total costs may not sum to 100% due to rounding.

7.7.3 Option 3 - Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)

The total NPV of the implementation and operational costs is EUR 642.05 billion, whilst the total NPV of the benefits, is between EUR 675.97 billion and EUR 827.74 billion. The resulting overall NPV over the defined time frame is estimated to be between EUR 33.92 billion and EUR 185.69 billion.

The following graph shows the overall NPV of the costs and benefits for option 3.

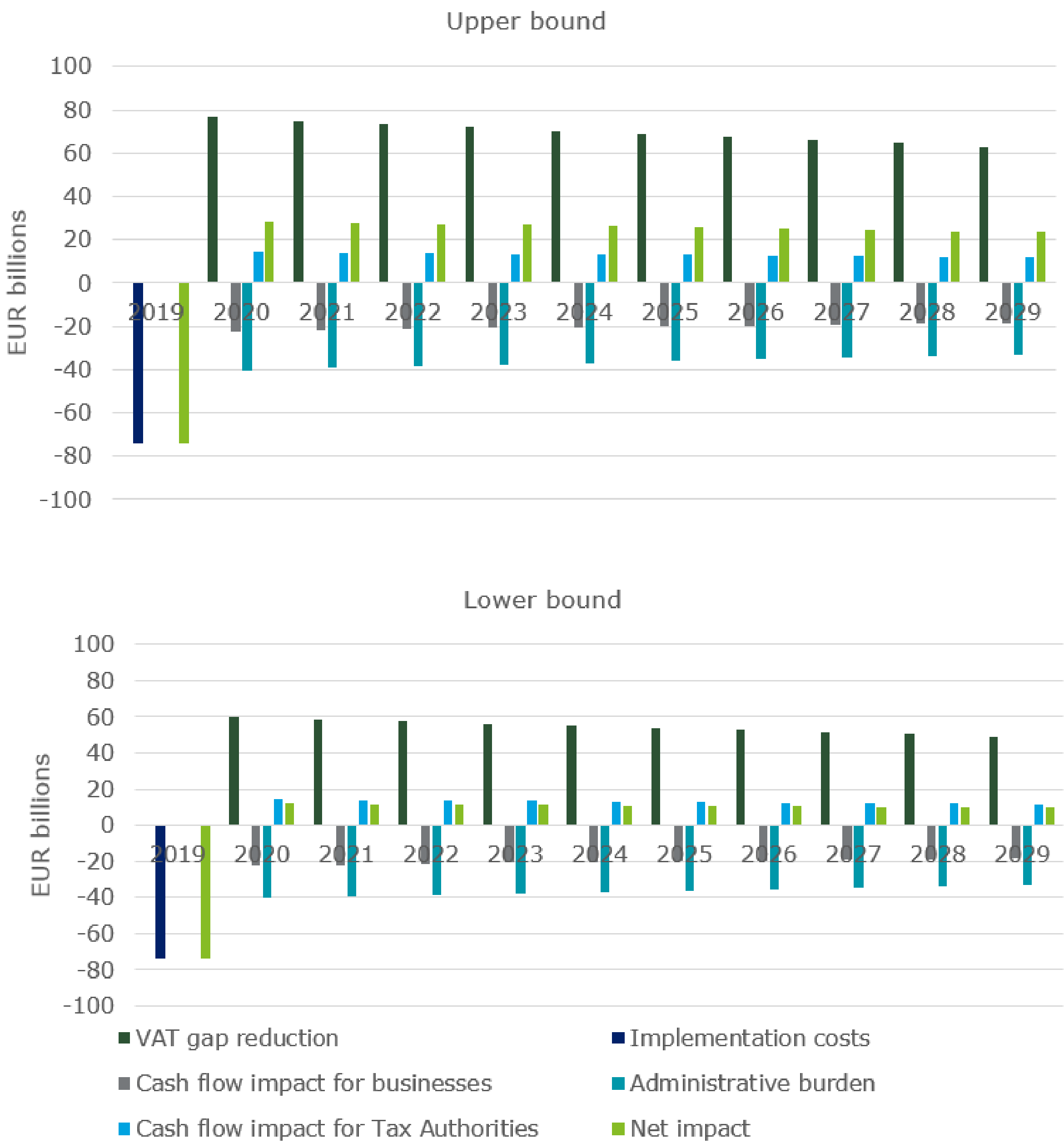
Figure 35: Total NVP of costs and benefits for policy option 3 (2020-2029)



Source: Deloitte analysis

The following graph shows both the yearly costs and benefits over the chosen timeframe under policy option 3.

Figure 36: Overivew of the annual costs and benefits for policy option 3 (2020-2029)



Source: Deloitte analysis

Under the upper bound scenario the annual net impact as a result of the introduction of policy option 3 ranges from EUR 28.57 billion (2020) to EUR 23.51 billion (2029).

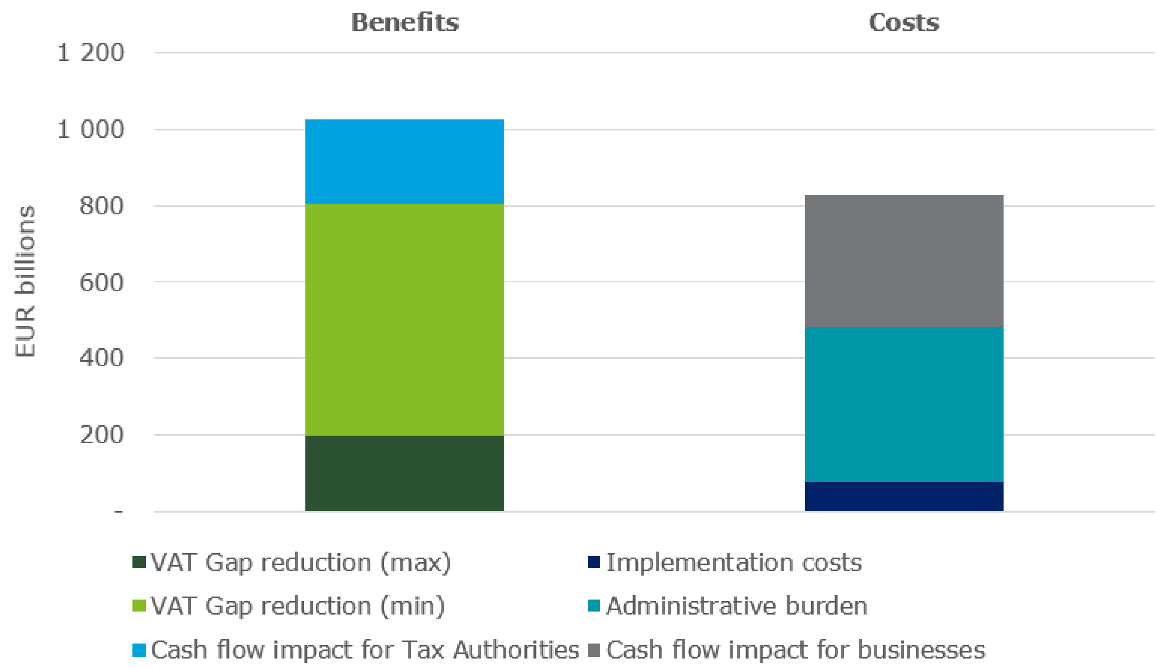
The total administrative costs account for 57% of the total costs, while the negative cash flow impact to businesses and the implementation costs accounts for 32% and 12% respectively. In comparison, the majority of the benefits are attributed to the reduction in the VAT Gap, which is between 81-84% of total benefits. The increased cash flow to tax authorities accounts for 16-19% of total benefits.

7.7.4 Option 4 - Option 3 with extension of split payment to credit card and cash payments

The total NPV of the implementation and operational costs under option 4 is estimated to be EUR 827.61 billion. The NPV of the benefits, as a result of the introduction of split payment on all payment and transaction types is between EUR 830.52 billion and EUR 1 026.37 billion. As a result, the overall NPV over the defined time frame is estimated to be between EUR -2.90 billion and EUR 198.75 billion.

The following graph shows the overall NPV of the costs and benefits for option 4.

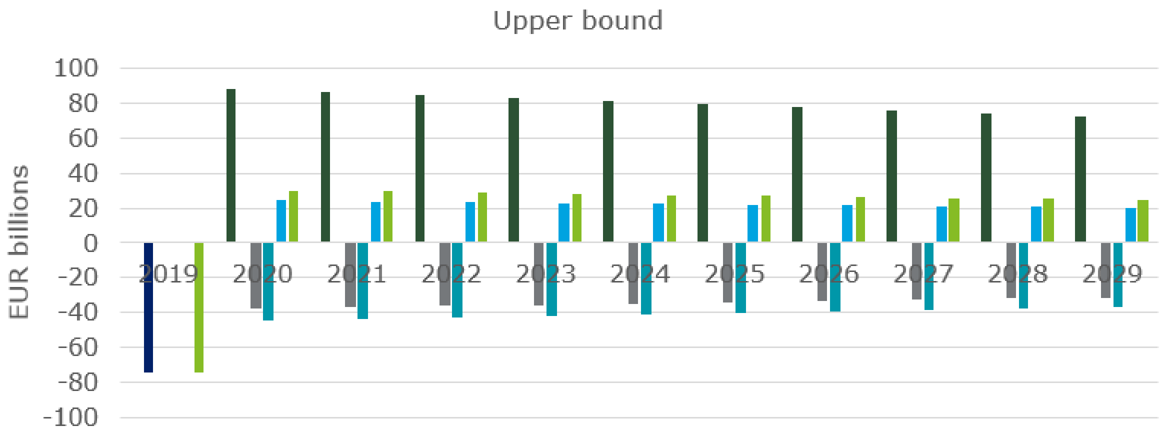
Figure 37: Total NPV of costs and benefits for policy option 4 (2020-2029)

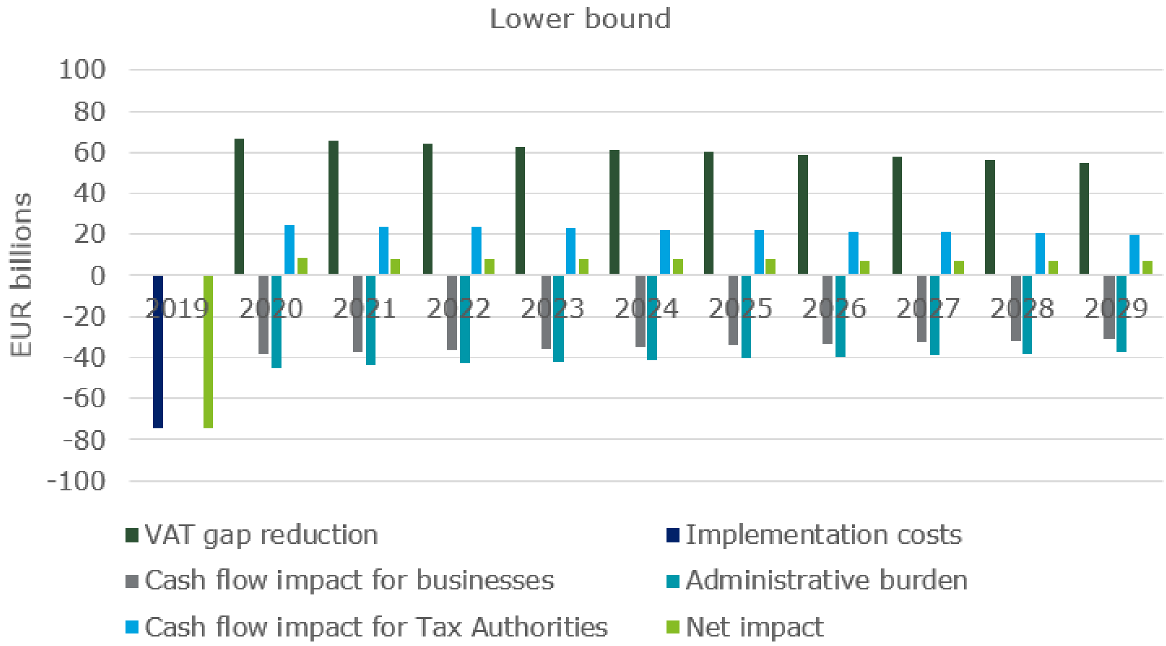


Source: Deloitte analysis

The following graph shows both the yearly costs and benefits over the chosen timeframe under policy option 4.

Figure 38: Overview of the annual costs and benefits for policy option 4 (2020-2029)





Source: Deloitte analysis

Under the upper bound scenario policy option 4 is estimated to have an annual net impact between EUR 30.04 billion (2020) to EUR 24.72 billion (2029) annually.

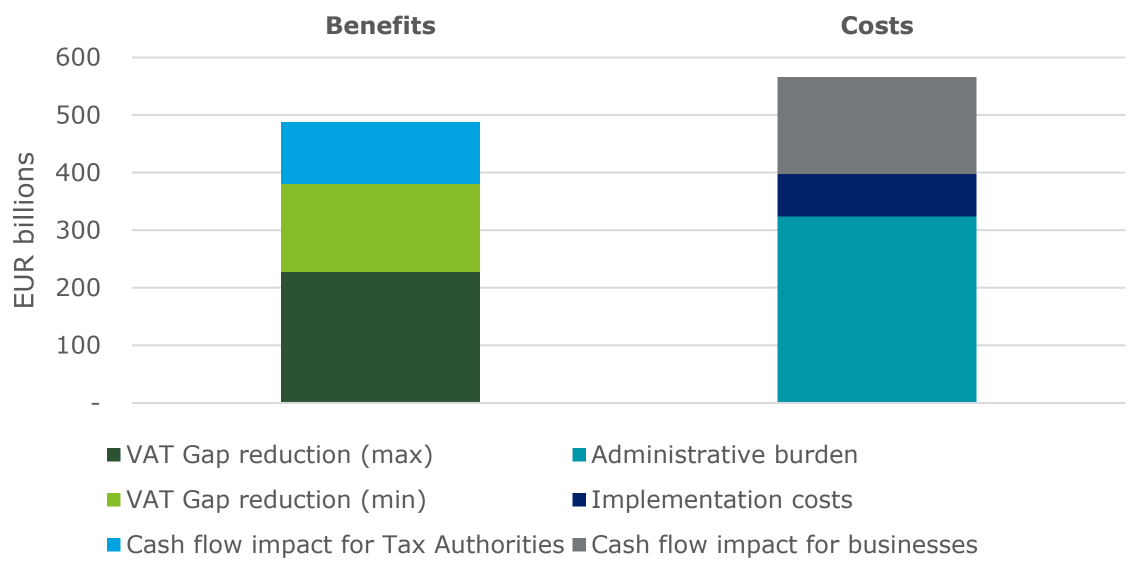
Under both scenarios total costs are accounted for by business administrative costs (49%), the negative cash flow impact to businesses (42%) and a one off implementation cost (9%). Whereas, total benefits are split between the reduction in the VAT Gap (73-78%) and the increased cash flow to tax authorities (22-27%) as a result of the introduction of a split payment mechanism under policy option 4.

7.7.5 Option 5 - Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)

The total NPV of the implementation and operational costs between the timeframe 2020-2029 is EUR - 566.5 billion. The total NPV of the benefits, as a result of a reduction in the VAT gap and a positive cash flow benefit to tax authorities is between EUR 259.5 billion and EUR 487.6 billion. This is lower than under Option 1, given that the definitive VAT regime by itself already leads to a large reduction of the MTIC fraud component within the VAT Gap. Under the upper bound scenario, where the maximum VAT gap reduction occurs, the overall NPV over the ten year period is estimated to be EUR – 78.9 billion. Under the alternative scenario the total NPV is EUR – 307.1 billion.

The following graph shows the overall NPV of the costs and benefits for policy option 5.

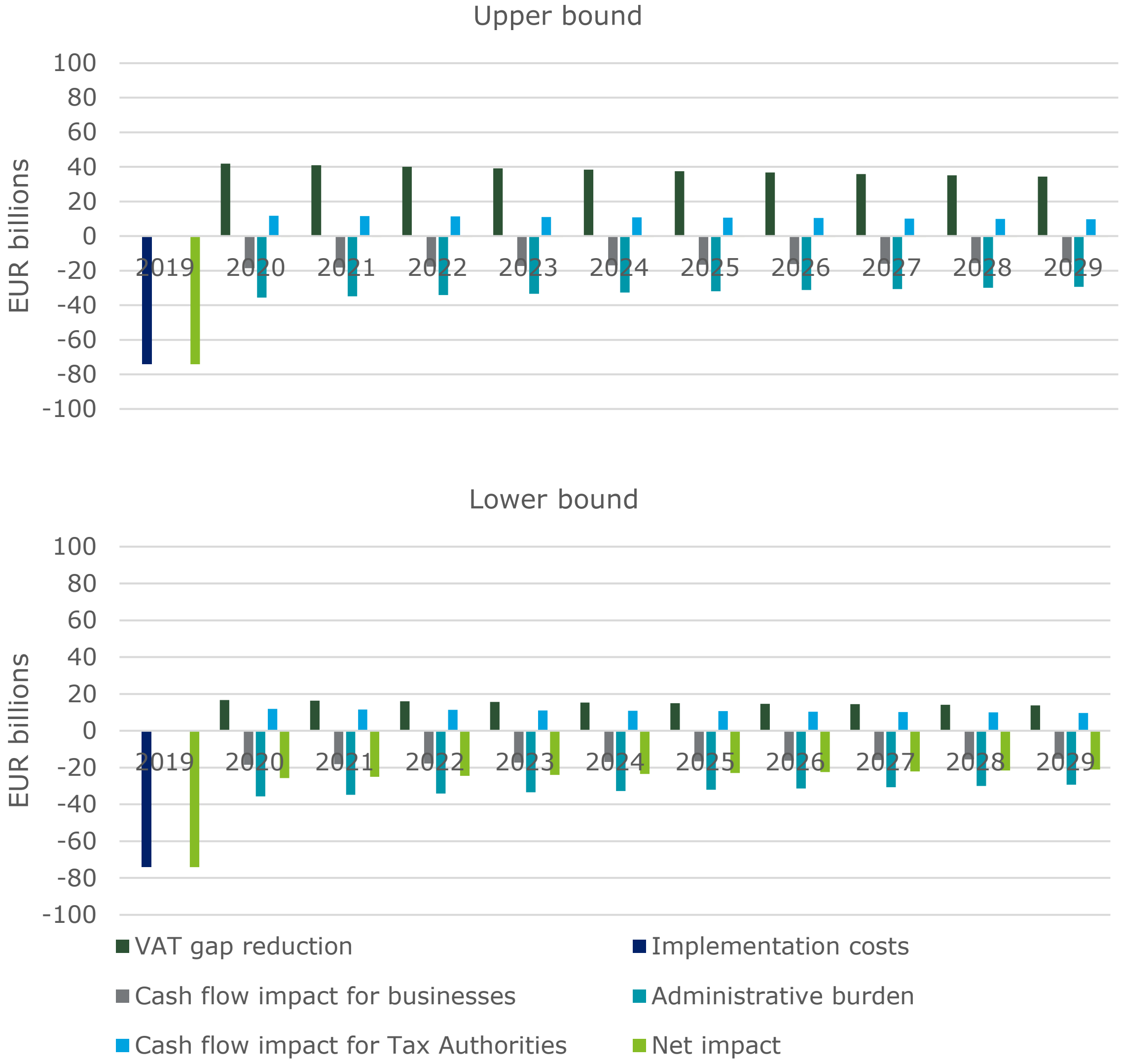
Figure 39: Total NPV of costs and benefits for policy option 5 (2020-2029)



Source: Deloitte analysis

As discussed above, the annual costs and benefits are also calculated over the time period for each of the options considered. The following graph shows both the yearly costs and benefits over the chosen timeframe under policy option 5.

Figure 40: Overview of the annual costs and benefits for policy option 5 (2020-2029)



Source: Deloitte analysis

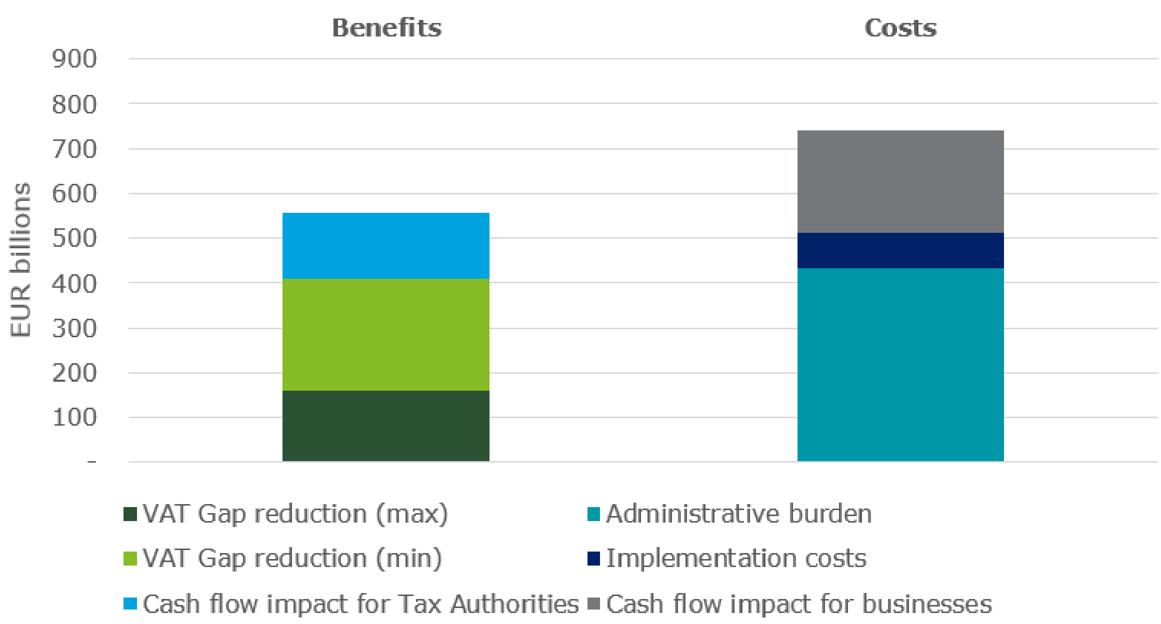
The estimated annual costs are larger than the annual benefits and as such the yearly net impact is negative under both scenarios. This net impact, ranging from EUR -0.52 billion (2020) to EUR -0.43 billion (2029) under the upper bound scenario, is mostly attributed to the additional administrative costs associated with the policy option. The total administrative costs account for 57% of the total costs, whilst the negative cash flow impact and the implementation costs account for 30% and 13% respectively. In comparison, the majority of the benefits are realised by the reduction in the VAT Gap (59-78%). The remaining benefits (22-41%) are made up from the increased cash flow to tax authorities as a result of option 5.

7.7.6 Option 6 - Option 5 with extension of split payment on EFT to B2C and B2G

The total NPV of the implementation and operational costs under option 6 is estimated to be EUR 741.04 billion. The NPV of the benefits, as a result of the introduction of policy option 6 is between EUR 394.32 billion and EUR 555.44 billion. As a result, the overall NPV over the time frame is estimated to be between EUR – 185.60 billion (upper bound) and EUR – 346.72 billion (lower bound).

The following graph shows the overall NPV of the costs and benefits for option 6.

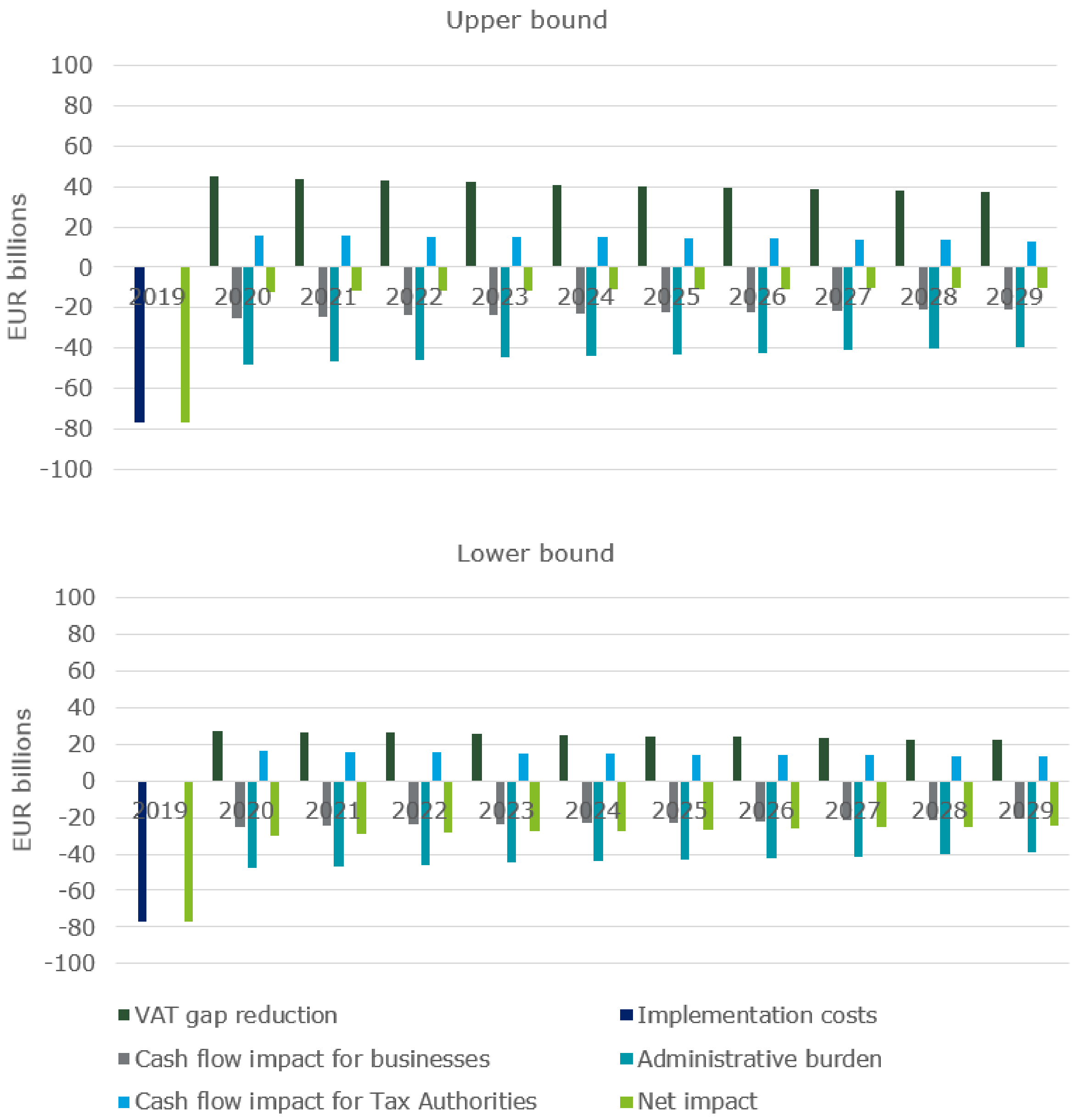
Figure 41: Total NPV of costs and benefits for policy option 6 (2020-2029)



Source: Deloitte analysis

The following graph shows both the yearly costs and benefits over the chosen timeframe under policy option 6.

Figure 42: Overview of the annual costs and benefits for policy option 6 (2020-2029)



Source: Deloitte analysis

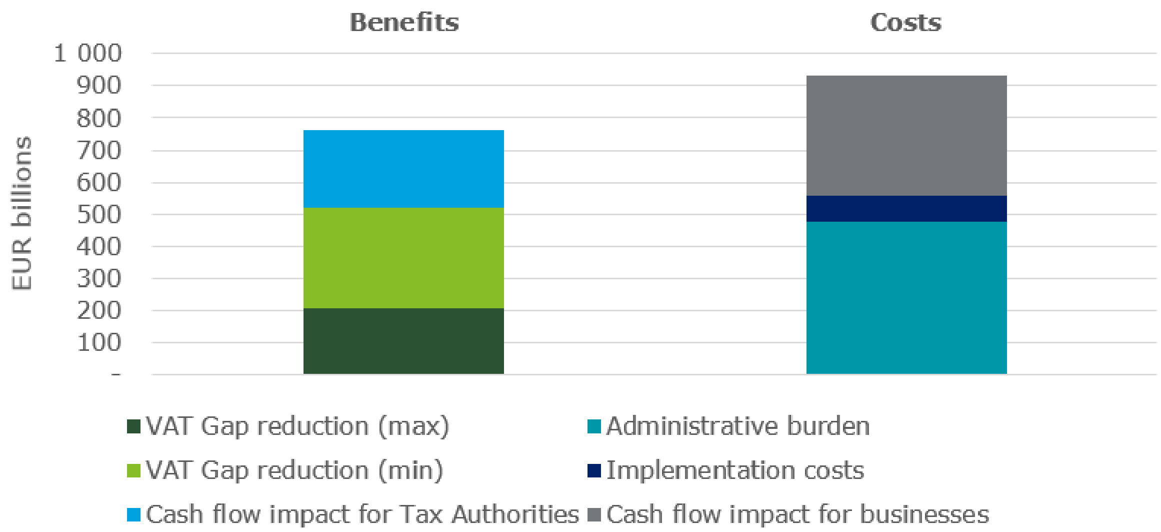
Under the upper bound scenario, applying a split payment mechanism under policy option 6 is estimated to result in a negative net impact ranging between EUR – 11.95 billion (2020) to EUR – 9.83 billion (2029) annually. Total costs are accounted for by business administrative costs (59%), the negative cash flow impact to businesses (31%) and a one off implementation cost (10%). In contrast, total benefits are attributed to the reduction in the VAT Gap (63-74%) and the increased cash flow to tax authorities (26-37%) as a result of the introduction of a split payment mechanism to all EFT transactions.

7.7.7 Option 7 - Option 6 with extension of split payment to credit card and cash payments

The total NPV of the implementation and operational costs between the timeframe 2020-2029 is EUR 932.35 billion. In contrast, the total NPV of the benefits to tax authorities is between EUR 554.92 billion and EUR 761.67 billion. Under the upper bound scenario the overall NPV over the ten year period is estimated to be EUR -170.68 billion. Under the alternative scenario (lower bound) the total NPV is EUR – 377.43 billion.

The following graph shows the overall NPV of the costs and benefits for policy option 7.

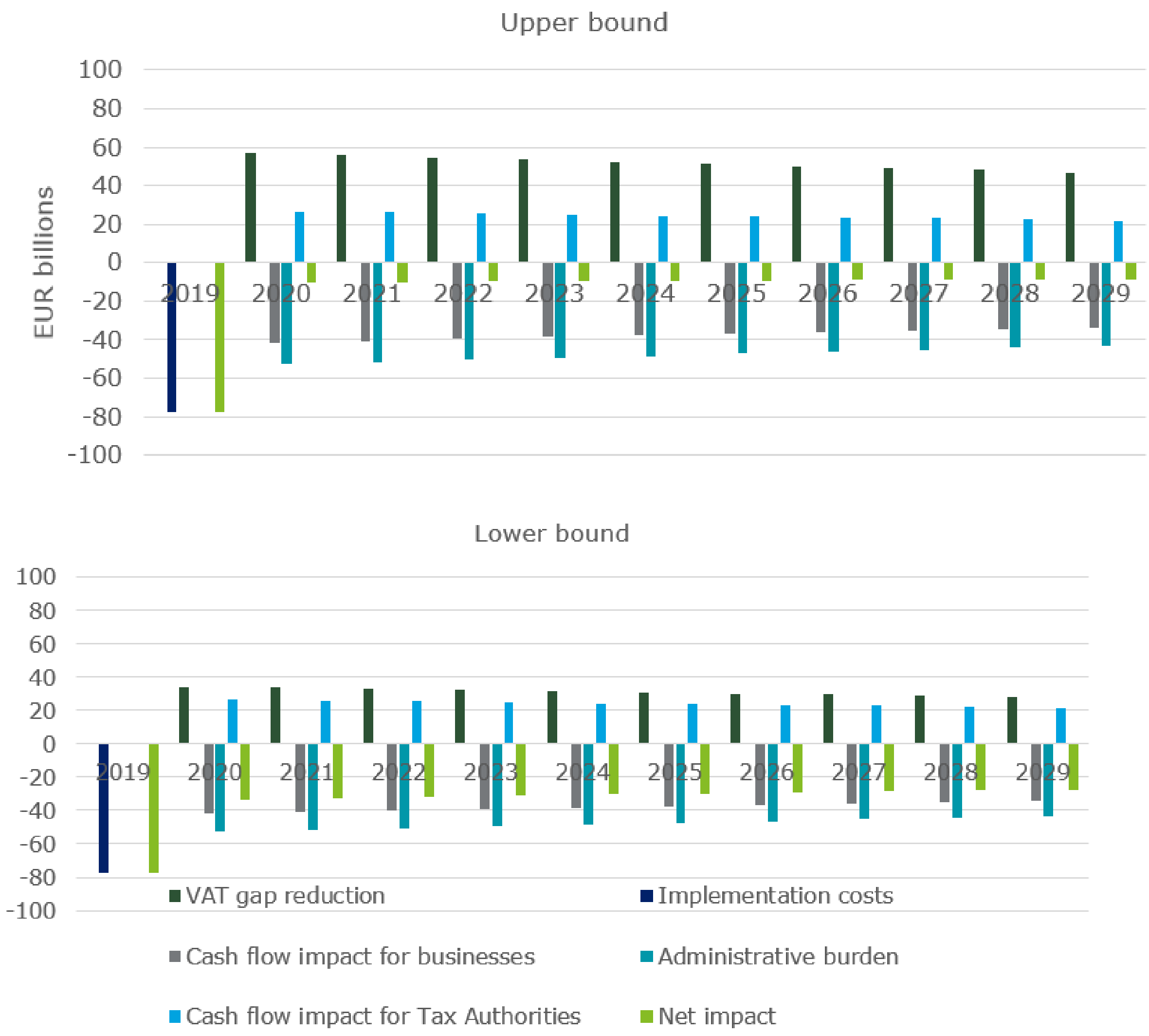
Figure 43: Total NPV of costs and benefits for policy option 7 (2020-2029)



Source: Deloitte analysis

The following graph shows both the yearly costs and benefits over the chosen timeframe under policy option 7.

Figure 44: Overview of the annual costs and benefits for policy option 7 (2020-2029)



Source: Deloitte analysis

As with options 5 and 6, the annual costs are greater than the annual benefits and as such the yearly net impact is negative. This yearly net impact, ranging from EUR – 10.28 billion (2020) to EUR -8.46 billion (2029) under the upper bound scenario, is mainly attributed to the additional administrative costs associated with this option. The total administrative costs over the ten year period are estimated to account for 51% of the total costs. The negative cash flow impact to businesses is also significant in this option accounting for 40%, while the remaining is attributed to the initial implementation costs.[159] The majority of the benefits are a result of the reduction in the VAT Gap (56-68%). The remaining benefits (32-44%) are made up from the increased cash flow to tax authorities.

[159] Note: Total costs may not sum to 100% due to rounding

7.7.8 Overview of overall cost-benefit analysis

The comparative impact of different policy options on the overall cost-benefit analysis are presented in the table below.

Table 46: Overall NPV of policy options (EUR billions)

Policy option	Benefits / Costs	VAT Gap reduction (min)	VAT Gap reduction (max)	Cash flow impact for Tax Authorities	Implementation costs	Administrative burden	Cash flow impact for businesses	Net impact
Options based on the current VAT regime								
Option 1	Benefits	405.50	629.67	94.28	-	-	-	43.57 to 267.74
	Costs	-	-	-	77.04	231.21	147.95	
Option 2	Benefits	391.69	608.23	91.79	-	-	-	69.56 to 286.10
	Costs	-	-	-	77.04	193.96	142.92	
Option 3	Benefits	545.16	696.93	130.81	-	-	-	33.92 to 185.69
	Costs	-	-	-	73.92	365.19	202.94	
Option 4	Benefits	607.90	803.75	222.62	-	-	-	2.90 to 198.75
	Costs	-	-	-	74.18	408.32	345.11	
Options based on the definitive VAT regime								
Option 5	Benefits	152.06	380.23	107.40	-	-	-	-307.05 to -78.88
	Costs	-	-	-	74.18	323.79	168.54	
Option 6	Benefits	247.89	409.01	146.42	-	-	-	-346.72 to -185.60
	Costs	-	-	-	77.04	435.43	228.56	
Option 7	Benefits	312.85	519.60	242.07	-	-	-	-377.43 to -170.68
	Costs	-	-	-	77.30	478.88	376.18	

Source: Deloitte analysis

Based on the above analysis the following conclusions are drawn regarding the impact of policy options on the overall cost benefit analysis:

Policy Options 1-4

- The total NPV of the benefits, as a result of a reduction in the VAT gap and cash flow benefit to tax authorities increases as the scope of the policy options is extended. The smallest NPV of total benefits occurs under option 2 with an estimated benefit of between EUR 483.48 billion and EUR 700.02 billion, whilst the largest NPV of benefits is between EUR 830.52 billion and EUR 1 026.37 billion under policy option 4.
- Under the upper bound scenario, where the maximum VAT gap reduction occurs, the overall NPV over the ten year period is estimated to range between EUR 185.69 billion (option 3) and EUR 286.10 billion (option 2). Under the lower bound scenario, the overall NPV over the same period is estimated to range between EUR 2.90 billion (option 4) and EUR 69.56 billion (option 2).
- Under the lower bound scenarios, there is no scenario where the benefits significantly outweigh the costs over the ten year period.
- The majority of total costs is accounted for by business administrative costs (47-57%). The remaining part consists of the negative cash flow impact to businesses (32-42%) and a one off implementation cost (9-19%). In contrast, total benefits are attributed to the reduction in the VAT Gap (73-87%) and the increased cash flow to tax authorities (13-27%) as a result of the introduction of the policy options considered above.
- Overall, policy option 2 is estimated to produce the highest NPV, while expanding the scope under policy option 3 and 4 produces the lowest NPV.

Policy Options 5-7

- Under policy option 5 the total NPV of total costs is EUR 566.51. However under policy option 7, the total NPV of costs is estimated to increase to EUR 932.35 billion.
- The total NPV of the benefits, as a result of a reduction in the VAT gap and a positive cash flow benefit to tax authorities also increases as the scope of the policy options is extended. However, the introduction of the definitive regime has a considerable impact on the realised benefits. Under option 4 the estimated NPV of total benefits is between EUR 830.52 billion and EUR 1026.37 billion, whilst policy option 7 is estimated to result in a NPV of total benefits of between EUR 554.92 billion and EUR 761.67 billion over the ten year time period. As the definitive regime already reduces the VAT Gap, the impact of the application of a split payment mechanism on the VAT Gap is reduced, and hence limits the resulting benefits under policy option 5, 6 and 7.
- Under the upper bound scenario, where the maximum VAT gap reduction occurs, the overall NPV over the ten year period is estimated to range between EUR -78.88 billion (option 5) and EUR -185.60 billion (option 6). This negative NPV is largely driven by the additional recurrent administrative costs associated with the application of a split payment mechanism under all policy options.

- Under the alternative scenario the total NPV is between EUR -307.05 billion (option 5) and EUR -377.43 billion (option 7).
- Under all policy options considered under the definitive regime, applying a split payment mechanism is estimated to result in an annual negative net impact.
- The majority of total costs is accounted for by business administrative costs (49-59%). The remaining part consists of the negative cash flow impact to businesses (30-42%) and a one off implementation cost (9-13%). In contrast, total benefits are attributed to the reduction in the VAT Gap (56-78%) and the increased cash flow to tax authorities (22-44%) as a result of the introduction of the policy options considered above.

8 Conclusions

This sections contains the main conclusions on the costs and benefits of each option and concluding remarks regarding the overall impact of the split payment mechanism.

8.1 Costs and benefits per policy option

The table below provides an overview of the key findings from the analysis of the costs and benefits of each option.

Table 47: Overview of costs and benefits of Option 1-7

Impacts	Options in the current VAT regime				Options in the definitive VAT regime			
	Option 1	**Option 1(b)**	**Option 2**	**Option 3**	**Option 4**	**Option 5**	**Option 6**	**Optioon 7**
Main advantages	• Faster VAT collection • Tax authorities have detailed transactional information on B2B supplies subject to split payment • reduction of VAT fraud and avoidance	• Tax authorities reassured that VAT funds paid to blocked account can be used only for VAT purposes • Reduced cash flow impact compared to other options • lower risk of fraud shift to missing customer fraud.	• Same as option 1 • Member State can choose whether to apply split payment or GRCM	• increased positive impact on tax authorities cash flow • potential further reduction of VAT avoidance and fraud	• further level the business playing field • reduce the risk of VAT avoidance and fraud shifting to payments not covered by split payment • positive cash flow impact for tax authorities	• Same as option 1 • Businesses relieved from VAT payment liability on cross-border supplies subject to split payment	• same as on Option 3 and Option 5	• same as on Option 4 and Option 6
Main disadvantages	• negative cash flow impact for supplier • new liability for customer for VAT payment • high number of additional financial transactions. • new administrative obligations of submitting transactional statements • increased administrative cost for tax	• significant increase in compliance and reconciliation effort for supplier on each invoice • high number of additional financial transactions • business has still some access to the VAT funds, which in combination to supplies not included in split payment regime	• Same as option 1 • added complexity and administrative burden for businesses when trading internationally and having to be able to apply different VAT mechanisms.	• added complexity and consequential increase in administrative burden for supplier • increase in the negative cash flow impact. • New administrative burdens for public bodies • increased administrative cost for tax authorities for processing	• increasing complexity and related administrative burden of businesses and tax authorities	• Same as option 3 • added complexity for both tax authorities and businesses	• same as on Option 3 and Option 5	• same as on Option 4 and Option 6

Impacts	Options in the current VAT regime				Options in the definitive VAT regime			
	Option 1	Option 1(b)	Option 2	Option 3	Option 4	Option 5	Option 6	Optioon 7
	authorities for processing additional payments	(e.g. B2C supplies) could be used for new type of VAT fraud schemes		additional payments				
VAT Gap	(-)27-42%	(-)27-42%	(-)27-42%	(-)38-49%	(-)42-56%	(-)13-32%	(-)21-35%	(-)27-44%
	EUR 40.7 to 63.2 billion	EUR 40.7 to 63.2 billion	EUR 39.3 to 61 billion	EUR 54.7 to 70 billion	EUR 61 to 80.7 billion	EUR 15.3 to 38.2 billion	EUR 24.9 to 41.1 billion	EUR 31.4 to 52.2 billion
Business cash flow	EUR 10.8 billion	N/A	EUR 10.5 billion	EUR 14.9 billion	EUR 25.2 billion	EUR 12.3 to 11 billion	EUR 16.8 to 15.5 billion	EUR 27.7 to 26.2 billion
Member State cash flow	EUR 10.8 billion	N/A	EUR 10.5 billion	EUR 14.9 billion	EUR 25.2 billion	EUR 12.3 to 11 billion	EUR 16.8 to 15.5 billion	EUR 27.7 to 26.2 billion
Administrative costs (businesses and public bodies)	(+)33%	(+)35%	(+)27%	(+)52%	(+)58%	(+)46%	(+)61%	(+)68%
	EUR 98.4 billion	EUR 100.1 billion	EUR 94.5 billion	EUR112.4 billion	EUR 117 billion	EUR 108.1 billion	EUR 119.8 billion	EUR 120.3 billion
Administrative costs (1 business)	(+)33%	(+)35%	(+)33%	(+)57%	(+)63%	(+)46%	(+)61%	(+)67%
	EUR 3 428	EUR 3 487	EUR 3 431	EUR 4 061	EUR 4 225	EUR 3 766	EUR 4 153	EUR 4 311
Administrative costs (1 [public body)	N/A	N/A	N/A	6 340	6 340	N/A	6 340	6 340
Implementation costs	EUR 2 500	EUR 2 500	EUR 2 500	EUR 2 500	EUR 2 500	EUR 2 500	EUR 2 500	EUR 2 500
Overall NPV (2020-2029)	EUR 43.57 to 267.74 billion	N/A	EUR 69.56 to 286.10 billion	EUR 33.92 to 185.69 billion	EUR 2.90 to 198.75 billion	EUR – 307.05 to - 78.88 billion	EUR – 346.72 to – 185.60 billion	EUR – 377.43 to – 170.68 billion

Source: Deloitte analysis

8.1.1 Options 1 and 1(b) - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)

Option 1, introducing a split payment mechanism for B2B EFT transactions is expected to have a **low to medium overall impact** on the reduction of the VAT Gap, most notably in the area of MTIC fraud (50-70%), non-compliance (30-50%) and other fraud and VAT gap components (30-50%) such as input VAT repayment fraud and insolvency. However a shift to a new type of 'missing customer' fraud may occur. The overall reduction across the different types of fraud/non-compliance is **27-42%**. In addition to the VAT Gap reduction, **tax authorities** across the EU are estimated to benefit from increased yearly **cash flows,** resulting in reduced financial cost of about EUR 10.8 billion.

For **businesses**, the impacts are significantly negative, with an expected 33% increase in **administrative costs** both for individual businesses and to the costs for all businesses in the EU, resulting mainly from the additional obligations of splitting the VAT and paying it to tax authorities and filing separate monthly split payment sales and purchase statements. The first type of additional cost in particular is strictly linked to the volume of transactions (and related invoices) that businesses have to process and for which VAT has to be paid on a transactional basis. With the addition of a blocked VAT bank account into Option 1 (i.e. **Option 1(b)**), administrative burdens would differ slightly (i.e. no obligation to file monthly statements, but adding the need to manage and reconcile the extra bank account), however business costs are expected slightly higher than under Option 1 (35% increase with respect to the baseline scenario). Businesses would also encounter one-off implementation costs of approximately EUR 2 500 for adaptations to ERP/accounting systems and training to become familiar with the mechanism.

Cash flow impacts are felt more by the largest businesses in the EU and in Member States with the largest economies, resulting in an additional yearly **financing cost** of EUR -16.36 billion to all affected businesses.

The total NPV of the implementation and operational costs between the timeframe 2020-2029 is EUR 456.21 billion. The total NPV of the benefits, as a result of a reduction in the VAT gap and a positive cash flow benefit to tax authorities is between EUR 499.78 billion and EUR 724.0 billion. **The overall NPV over the ten year period is estimated to be between EUR 43.57 billion and EUR 267.74 billion.**

8.1.2 Option 2 - Option 1 combined with a generalised reverse charge mechanism in certain Member States

Option 2 encompasses the split payment mechanism in Option 1 without applying it to Member States applying a GRCM, lowering the number of businesses and Member States impacted. For the purposes of the study, two Member States (Austria and Czech Republic) were assumed to apply a GRCM and therefore are not impacted by the split payment mechanism. Therefore, excluding two Member States from the split payment system, the individual impacts to businesses affected by the mechanism remain the same as in Option 1 but the overall (EU level) impacts are slightly different per type of impact.

Regarding the VAT Gap, Option 2 is expected to have a **low to medium impact** on the reduction of the VAT Gap, most notably, as in the previous option, in the area of MTIC fraud (50-70%), non-compliance (30-50%) and other fraud and VAT gap components (30-50%). The overall reduction across the different types of fraud/non-compliance is **27-42%.** In addition to the VAT Gap reduction, **tax authorities** across the EU are estimated to benefit from increased yearly **cash flows resulting in a reduced financial cost** of about EUR 10.5 billion.

For the individual **business**, the estimated administrative costs do not differ notably from those in Option 1 and are expected to increase by 33%. For all affected businesses in the EU, the cost increases by 27%. The reason for the lower costs at EU level compared with Option 1 is the fact that Option 2 excludes businesses that are assumed to be applying the GRCM. Again, the main drivers of these costs are the additional obligations of splitting the VAT and paying it to tax authorities, which is strictly linked to the volume of transactions, and filing separate monthly split payment sales and purchase statements. Businesses would also encounter one-off implementation costs of approximately EUR 2 500 for adaptations to ERP/accounting systems and training to become familiar with the mechanism.

Cash flow impacts are felt more by the largest businesses in the EU and in Member States with the largest economies, resulting in an additional yearly **financing cost** of -16.36 billion to all affected businesses.

The total NPV of the implementation and operational costs under option 2 is EUR –413.92 billion. The NPV of the benefits, as a result of the introduction of policy option 2 is between EUR 483.5 billion and EUR 700.0 billion. As a result, the **overall NPV over the ten year period is estimated to be between EUR 69.6 billion and EUR 286.1 billion**. Like with option 1, the positive NPV seen under policy option 2 is driven by the implied reduction in the VAT Gap.

8.1.3 Option 3 - Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)

Option 3 builds upon option 2 and extends the application of split payment to B2C and B2G transactions. With this expansion of the mechanism, impacts will have more far reaching consequences. Regarding the VAT Gap, this option is expected to have a **medium level impact** overall with notable reductions in MTIC fraud (70-90%), and other fraud and VAT gap components (50-70%). The overall reduction across the different types of fraud/non-compliance is **38-48%**. In addition to the VAT Gap reduction, **tax authorities** across the EU are estimated to benefit from increased yearly **cash flows** of about EUR 14.87 billion.

For individual **businesses**, administrative costs are expected to increase by 57% due to the increasingly higher number of transactions that now need to be split and the additional complexity to VAT returns. At the EU level, administrative costs for businesses would increase by 51% overall.

As the option would also impact on public bodies and subject them to split payment on their purchases, public bodies are expected to bear administrative costs in some form linked to VAT registration, splitting of VAT and submission of monthly purchase lists to tax authorities. These are all new costs to public bodies. Businesses and public bodies would also encounter one-off implementation costs of approximately EUR 2 500 for adaptations to ERP/accounting systems and training to become familiar with the mechanism.

Cash flow impacts are felt more by the largest businesses in the EU and in Member States with the largest economies, resulting in an additional yearly **financing cost** of EUR -23.03 billion to all affected businesses.

The total NPV of the implementation and operational costs is EUR 642.05 billion, whilst the total NPV of the benefits, is between EUR 675.97 billion and EUR 827.74 billion. **The resulting overall NPV over the defined time frame is estimated to be between EUR 33.92 billion and EUR 185.69 billion.**

8.1.4 Option 4 - Option 3 with extension of split payment to credit card and cash payments

Option 4, builds upon option 3 and extends the application of split payment to credit card and cash transactions. As in option 3, with an extended scope of the mechanism, impacts will have more far reaching consequences.

Regarding the VAT Gap, this option is expected to have a **medium level impact** overall with notable reductions in MTIC fraud (70-90%), non-compliance (50-70%) and other fraud and VAT gap components (50-70%). The overall reduction across the different types of fraud/non-compliance is **42-56%**. In addition to the VAT Gap reduction, **tax authorities** across the EU are estimated to benefit from increased yearly **cash flows** of about EUR 25.2 billion.

For individual **businesses**, administrative costs are expected to increase by 63**%** due to the increasingly higher number of transactions that now need to be split and the additional complexity to VAT returns. At the EU level, administrative costs for businesses would increase by 57% overall.

As in Option 3, public bodies are also expected to bear new administrative costs in some form linked to VAT registration, splitting of VAT and submission of monthly purchase lists to tax authorities. Businesses and public bodies would also encounter **one-off implementation costs** of approximately **EUR 2 500** for adaptations to ERP/accounting systems and training to become familiar with the mechanism.

Cash flow impacts are felt more by the largest businesses in the EU and in Member States with the largest economies, resulting in an additional yearly **financing cost** of EUR -39.03 billion to all affected businesses.

The total NPV of the implementation and operational costs under option 4 is estimated to be EUR 827.61 billion. The NPV of the benefits, as a result of the introduction of split payment on all payment and transaction types is between EUR 830.52 billion and EUR 1 026.40 billion. **As a result, the overall NPV over the defined time frame is estimated to be between EUR -2.90 billion and EUR 198.25 billion.**

8.1.5 Option 5 - Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)

Option 5 operates in the definitive regime and introduces a split payment mechanism to B2B, EFT transactions (as in Option 1). The impacts in option 5 are similar to that of option 1 but take into account the specificities of the definitive regime and resulting impacts. The most notable difference in the functioning of the mechanism in the definitive regime compared to the normal regime is the application of split payment to cross-border supplies to non-certified taxable persons (in addition to domestic supplies to taxable persons).

The definitive regime is by itself expected to reduce MTIC fraud by 83%. The additional impact of Option 5 on the reduction of the VAT Gap in the definitive regime is expected to be low with a 13-32% reduction estimated. In addition to VAT Gap reductions, Member States' **tax authorities** across the EU are estimated to benefit from increased yearly **cash flows resulting in a reduced financing cost** of between EUR 11 billion and EUR 12.3 billion.

For individual **businesses** and in the EU overall, administrative costs are expected to increase by **46%.** The main driver of costs is the application of split payment to cross-border transactions between non-certified taxable persons as well as to domestic transactions doubling the number of payments that a business has to make on its purchases. Related administrative tasks (i.e. VAT return, sales and purchase lists) also increase the burden on businesses. Overall, this option is estimated to increase the overall administrative costs for all affected EU businesses by 46%. Businesses would also encounter **one-off implementation costs** of approximately **EUR 2 500** for adaptations to ERP/accounting systems and training to become familiar with the mechanism.

Cash flow impacts are felt more by the largest businesses in the EU and in Member States with the largest economies, resulting in an additional yearly **financing cost** of EUR -19.29 billion to EUR -17.33 billion to all affected businesses.

The total NPV of the implementation and operational costs between the timeframe 2020-2029 is EUR - 566.5 billion. The total NPV of the benefits, as a result of a reduction in the VAT gap and a positive cash flow benefit to tax authorities is between EUR 259.5 billion and EUR 487.6 billion. **Under the upper bound scenario, where the maximum VAT gap reduction occurs, the overall NPV over the ten year period is estimated to be EUR – 78.9 billion. Under the alternative scenario the total NPV is EUR – 307.1 billion.**

8.1.6 Option 6 - Option 5 with extension of split payment on EFT to B2C and B2G

Option 6 builds on Option 5 and expands the application of split payment to B2C and B2G transactions (as in Option 3 under the normal regime).

Regarding the VAT Gap, this option is expected to have a **low to medium level impact** on its reduction overall with a notable reduction in MTIC fraud (50-70%). The overall reduction across the different types of fraud/non-compliance is **21-35%**. In addition to the VAT Gap reduction, **tax authorities** across the EU are estimated to benefit from increased yearly **cash flows** of between EUR 15.51 billion to EUR 16.76 billion.

For individual **businesses** and in the EU overall, administrative costs are expected to increase by **61%.** As in Option 5, the main driver of costs is the application of split payment to cross-border transactions between non-certified taxable persons as well as to domestic transactions. Overall, this option is estimated to increase the overall administrative costs for all affected EU businesses by 61%. On top of this, the application of split payment is extended to B2C and B2B transactions increasing the number of transactions that now need to be split.

As the option would also impact on public bodies and subject them to split payment on their purchases, they will bear new administrative costs in some form of VAT registration, splitting of VAT and submission of monthly purchase lists to tax authorities. Businesses and public bodies will also encounter **one-off implementation costs** of approximately **EUR 2 500** for adaptations to ERP/accounting systems and training to become familiar with the mechanism.

Cash flow impacts are felt more by the largest businesses in the EU and in Member States with the largest economies, resulting in an additional yearly **financing cost** of EUR -26.16 billion to EUR-24.19 billion EUR to all affected businesses.

The total NPV of the implementation and operational costs under option 6 is estimated to be EUR 741.04 billion. The NPV of the benefits, as a result of the introduction of policy option 6 is between EUR 394.32 billion and EUR 555.44 billion. **As a result, the overall NPV over the time frame is estimated to be between EUR – 346.72 billion and EUR – 185.60 billion.**

8.1.7 Option 7 - Option 6 with extension of split payment to credit card and cash payments

Option 7, builds upon option 6 and extends the application of split payment to credit card and cash transactions (as in Option 4 under the normal regime).

Regarding the VAT Gap, this option is expected to have a **low to medium level impact** on its reduction overall with a notable further reduction in MTIC fraud (50-70%). The overall reduction across the different types of fraud/non-compliance is **27-44%**. In addition to the

VAT Gap reduction, **tax authorities** across the EU are estimated to benefit from increased yearly **cash flows** of between EUR 15.51 billion to EUR 16.76 billion.

For individual **businesses** and in the EU overall, administrative costs are expected to increase by **67%** owing mostly to the large amount of transactions that are now subject to split payment and the associated additional complexity in VAT reporting.

As in Option 6, public bodies will bear new administrative costs in some form of VAT registration, splitting of VAT and submission of monthly purchase lists to tax authorities. Businesses and public bodies will also encounter **one-off implementation costs** of approximately **EUR 2 500** for adaptations to ERP/accounting systems and training to become familiar with the mechanism.

Cash flow impacts are felt more by the largest businesses in the EU and in Member States with the largest economies, resulting in an additional yearly **financing cost** of EUR -43 billion to -40.7 billion to all affected businesses.

The total NPV of the implementation and operational costs between the timeframe 2020-2029 is EUR 932.35 billion. In contrast, the total NPV of the benefits to tax authorities is between EUR 554.92 billion and EUR 761.67 billion. **Under the upper bound scenario the overall NPV over the ten year period is estimated to be EUR -170.68 billion. Under the alternative scenario (lower bound) the total NPV is EUR – 377.43 billion.**

8.2 Concluding remarks

8.2.1 Current VAT regime

The main aim of the split payment mechanism is to combat VAT fraud with a view to reducing the VAT Gap. Results of the CBA show that all options are expected to reduce the VAT Gap to some extent ranging from 27% to 56% reduction under the current regime. The most notable reductions under the current regime are found in the proportion of the VAT Gap made up by MTIC fraud, thereby confirming that split payment has the potential to significantly reduce this type of fraud. In addition, it was found that the split payment mechanism would also reduce non-compliance due to new reporting requirements and increased transparency. It also has a positive impact on VAT repayment fraud and the risk of insolvencies, but to a lesser extent.

Although MTIC fraud occurs mainly in B2B EFT transactions, pointing to Option 1 as the most appropriate response to this problem, there is a risk of fraud shifting to transactions outside of the split payment, such as B2C or non-EFT modes of payment, as well as to new types of fraud such as ‘missing customer’ fraud.

Since it is the widest in scope, applying to B2B, B2C and B2G transactions via EFT, credit card and cash, Option 4 is regarded as the most effective option for reducing the VAT Gap overall.

However a wider application of split payment is accompanied by higher costs for businesses and public bodies which increase substantially throughout the options.

As well as reductions in the VAT Gap, tax authorities would also benefit from a cash flow increase with a split payment. The opposite can be said for businesses, whose cash flow would be adversely affected by the mechanism.

Businesses would be negatively affected by the implementation of a split payment mechanism also by an increase in their administrative costs. Because of the payment of VAT on a transactional basis for B2B and B2G EFTs and increased reporting requirements, business costs would be increased by at least 33% (up to 57% under option 4) and public bodies would be confronted with entirely new obligations if applied to them (Option 3 and Option 4). The impact on business costs is however highly dependent on the number of transactions conducted by the individual business and thus varies depending on business size and sector. Administrative costs could also be reduced with increased automation of the system (e.g. automatic split payments, e-invoicing, pre-filled VAT returns) however these are likely to have high initial implementation costs both for businesses and Member States.

Considering impacts assessed, the overall impact of introducing a split payment mechanism under the current VAT regime would be highly uncertain. In fact, the benefit in terms of reductions in the VAT Gap are not unequivocally higher than the costs imposed on businesses and public bodies (both administrative costs and cash flow impacts), and are even outweighed when applied to the entire volume of transactions (Option 4).

Legislatively, introducing a split payment mechanism in the current regime would entail changes to several provisions of the VAT Directive or introducing it as a **new special scheme under Title XII Special Schemes**, containing all required provisions that derogate from the common provisions, as well as all necessary new definitions. This is considered a more suitable approach, since it can be adapted to the scope of the split payment mechanism implemented and especially if the split payment mechanism is introduced as optional for the Member States.

8.2.2 Definitive VAT regime

Charging and collecting VAT by the supplier (opposite to the split payment concept) is an important element of the definitive VAT regime and seen as a significant anti-fraud measure. Therefore, split payment could be applied to domestic transactions in the same way as under the current VAT regime, but a question would arise on the VAT treatment of intra-EU cross-border supplies, where the changes introduced by the definitive regime (taxation) and split payment (no VAT collected by supplier) would be conflicting, although having the same objective to tackle MTIC fraud. A single regime throughout the supply chain would seem simpler and less burdensome than a combination of the two. The study assessed the application of split payment to domestic transactions and to cross-border supplies to non-certified taxable persons.

Under the definitive VAT Regime, MTIC fraud is expected to decrease substantially compared to the level in the current regime (by 83%). Nevertheless, split payment in the definitive regime is expected to further reduce the remaining 17 % of VAT gap by at least 13% in a split payment applying to B2B EFT, up to 44% with increases in the scope of application.

As under the current regime, with a wider scope of application, administrative costs for businesses would increase from 46% up to 67%. Under the definitive regime however, administrative costs are even higher than under the current regime due to the fact that more transactions are impacted by the split payment (i.e. cross-border transactions to non-certified taxable persons). Similarly, these costs could be reduced somewhat by the introduction of automation such as e-invoicing or automatic split payment but initial implementation costs would be high.

The cash flow of both businesses and tax authorities would also be impacted in opposite ways. Financing cost for businesses would decrease by EUR 17.3 billion in a limited application of split payment (Option 5) to EUR 43 billion in split payment with a wider scope (Option 7). On the other hand, tax authorities would benefit from an increase in cash flow related financing cost from EUR 11 billion to EUR 27.7 billion.

Considering the impacts assessed, it is clear that the costs of the split payment mechanism, even with a limited application would outweigh the benefits significantly in the definitive VAT regime. The specific characteristics of the definitive VAT regime and its significant impact on the treatment of taxable businesses (e.g. Implementation of the CTP concept) results in a high degree of incompatibility of introducing split payment in the definitive VAT regime context.

Annex A - Models of Split Payment Mechanism and their high level assessment

This annex presents different VAT collection models, including the current model which does not include a split payment mechanism.

Several options for splitting agents, as well as options for blocked VAT accounts are presented in each model. Different types of payment have also been taken into account. This is done firstly for transactions within a B2B context and then for transactions within a B2C or B2G context. In each model, we discuss also the application under the current VAT regime, the derogatory GRC regime and the definitive VAT regime.

A.1 Definitions used in this Section

In the description of the models below some terms will be used that need defining i.e.:

- The wholesaler, the retailer and the consumer
- B2B, B2C and B2G
- Splitting agent
- Blocked VAT bank account
- Settlement of VAT
- Payment methods
- Action

Each of these terms is explained in the paragraphs below.

The wholesaler, the retailer and the consumer

In the diagram below (Figure 45), specific terms are used for different participants in a simplified supply chain. The far left participant, the **wholesaler**, is a taxable person trading only with other taxable persons entitled to a right to recover input VAT (i.e. B2B sales). It will also have suppliers of its own, but it will not sell goods in a B2C relationship (as defined below).

The participant in the middle of the supply chain in Figure 45, the **retailer**, has B2G or B2C sales (as defined below).

The **consumer** in Figure 45 is a 'final consumer' meaning that it is a private person, purchasing the goods for his/her consumption who will not resell the goods/services or a non-taxable legal person or a taxable person which cannot recover any input VAT. A consumer will not have a right to deduct.

<u>In the model diagrams:</u>

- The wholesaler is represented by the symbol .
- The retailer is represented by the symbol .
- The consumer is represented by the symbol .
- The tax administration is represented by the symbol .
- Liability is represented by putting the symbol of the tax administration <u>under</u> the participant in the supply chain.

B2B, B2C and B2G

The categorisation of transactions into B2B, B2C and B2G transactions is explained in detail below[160].

B2B is to be regarded as the broadest category of transactions. It includes all supplies carried out by a taxable person to another taxable person. More specifically, B2B could include also all transactions with all legal persons and natural persons considered as taxable persons (i.e. engaged in economic activity). It also includes supplies to SME's applying the special scheme for small enterprises, supplies to farmers applying a flat rate scheme as well as supplies to mixed taxable persons (i.e. taxable persons with taxable and non-taxable supplies). The person receiving the payment (in diagrams the wholesaler of the goods or services) is a VAT registered taxable person. [161] B2B is the residual category including all non-defined transactions (i.e. all transactions not covered by B2C or B2G definition)[162].

B2C on the other hand is an exclusive category of transactions involving sales/supplies mostly to individuals, i.e. to final consumers that are private persons. B2C transactions may also involve non-taxable legal persons (e.g. non-profit organisations).

B2G finally is the other exclusive category consisting of transactions involving sales/supplies to public bodies who are acting as a public authority. Examples include the State, regional governments or local authorities (cities and communes), etc.

<u>In the model diagrams:</u>

- **B2B** transactions will be visualised in the left transaction
- **B2C and B2G** transactions are visualised in the right transaction

[160] We exclude for the purposes of this study, payments done by third parties to the vendor on behalf of the customer to settle any obligations between the third party and the buyer (so-called 'third party payer').

[161] If the person receiving the payment is not a VAT registered taxable person, then either VAT would not be charged on the supply or the payment would be outside the scope of VAT. For example, the sale of a second hand car by a private person (not acting as a professional) to another private person (also not acting as a professional) is not subject to VAT. As such, the question whether split the payment is not relevant (although the splitting agent will have to be able to distinguish between out of scope payments and inside of scope payments).

[162] Such wide scope of B2B supplies was in policy option design reduced to transactions between VAT registered businesses, which was considered necessary due to the design of the option. See section 6.3.1. for further information

Splitting agent

A second important definition is the term **splitting agent.** The term splitting agent is used for the entity who is carrying out the separation of the payment of the VAT and the payment of the taxable amount and all other amounts.

Under this definition, in the current VAT payment regime, the **wholesaler** or the **retailer** could be seen as the splitting agent. The wholesaler or retailer receives the full amount VAT inclusive from the buyer and 'splits' the VAT amount by accounting for it in their VAT return. Upon deduction of the input VAT, they then transfer the money to the tax authority (if applicable). In other words, the VAT the seller receives is transferred to tax authority periodically not on a transactional basis.

The models presented below describe how to apply a different splitting agent (e.g. the **customer or intermediary**) in order to separate the output VAT amount from the taxable base at the time of payment and transfer it to the tax authority directly and on transactional basis.

In the model diagrams:

- A split will be visualised in the diagram by an action (see below).

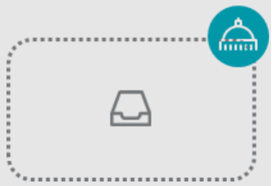
Blocked VAT bank account

The **blocked VAT bank account** is an account in which only VAT amounts are paid and received and which is potentially under the **direct control** of the **tax administration**. In this account a taxable person receives the output VAT of every payment from all their customers (either consumers or retailers). The taxable person could also use this account to pay for its input VAT.

The blocked VAT bank account is thus a **personalised and accessible account**. This concept is adopted from the 2010 PwC study[163].

In the model diagrams:

- A blocked VAT bank account is represented by a rectangular dotted shape with the symbol of the administration, as it is an account on which only VAT can be transferred.



[163] PwC, Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries, 20 September 2010, http://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/common/consultations/tax/future_vat/vat-study_en.pdf , pages 144-145.

Settlement of VAT

In the current VAT model, the final settlement of VAT is completed when the **taxable person completes the return and balances the VAT amount**. The taxable person then either pays the VAT balance to the tax authority or requests a refund when input VAT is higher than output VAT. In the split payment models below, the way in which VAT is settled in each case, is discussed.

<u>In the model diagrams:</u>

- A settlement with the authorities is visualised with an arrow towards the symbol of the administration.

Payment methods

Payment methods refer to the ways in which consideration is provided to a seller for their goods/services. The payment methods discussed in this paper are:

- Electronic Funds Transfer (EFT) (i.e. bank transfers from one bank account to another);
- Card payments;
- Cash;
- ePayments i.e. digital ways of payment such as PayPal, eWallets and digital/crypto currencies like Bitcoin.

<u>In the model diagrams:</u>

- EFT and credit card payments are represented by the symbol (a bank) .
- Cash payments are represented by the symbol € .
- Newer ways of payment (as PayPal, eWallets, Bitcoin…) are represented by the symbol ₿ .

Action

The term 'action' as used within the context of this paper refers to an **active decision or activity executed by one of the participants in the model.** This action might be done by one of the participants of the supply chain or by one of the intermediaries or even the tax authority.

For example, there are **two actions** if an intermediary splits a payment in a B2B transaction: first, the retailer starts a payment and second the intermediary splits the payment.

<u>In the model diagrams:</u>

- An action is represented by an arrow in the diagrams.

A.2 The current VAT payment model

Before considering possible split payment alternatives, we discuss the characteristics of the current VAT payment model.

Model A: The current model without split payment, status quo

Under the current VAT regime (without any split payment mechanism), a customer pays the invoice amount VAT inclusive to the supplier.

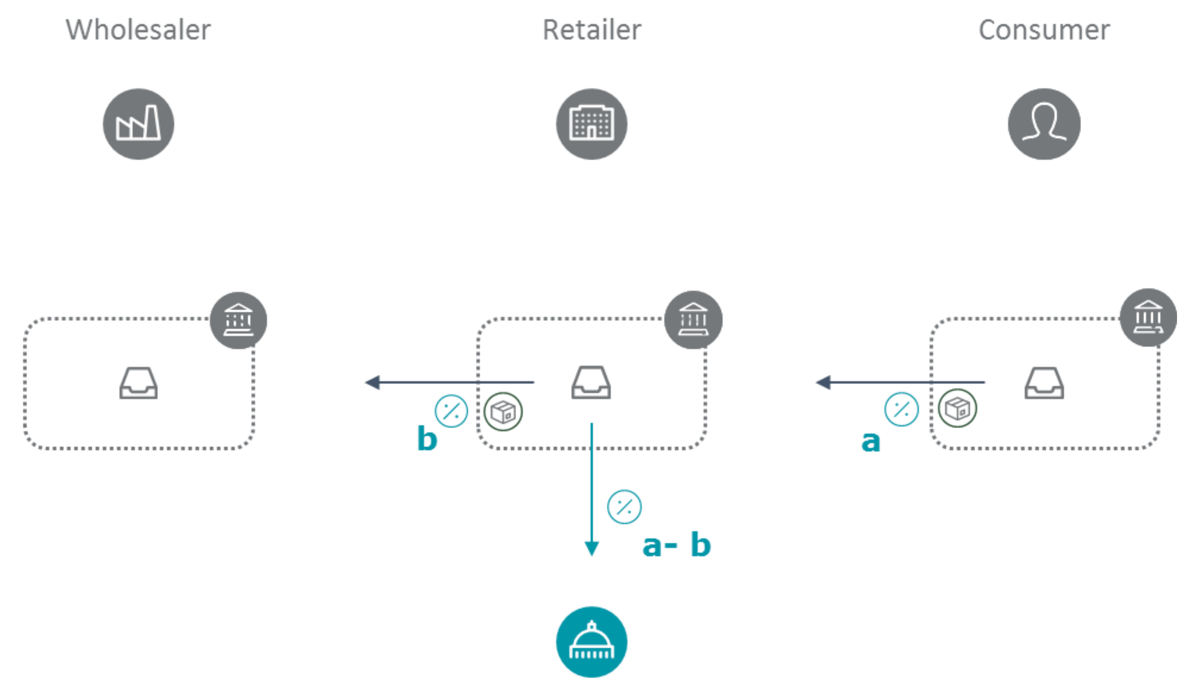
Retailers usually have both deductible input VAT they paid towards their own wholesalers or suppliers, as well as output VAT they receive from their customers (consumers).

The current VAT payment model is based on the principle of a taxable person (retailer) being able to balance his VAT payable (i.e. output VAT) and VAT receivable (i.e. input VAT) in the VAT return. The retailer only pays to the State the difference of the output VAT received and input VAT deducted. Alternatively, if the input VAT exceeds the output VAT, the retailer is entitled to a refund from the State.

Hence, the retailer is in a way its own splitting agent. It is also the one liable for the payment of VAT.

Figure 45: Model A - The current model without split payment

Overview



Each bullet is an active decision/action by the party:

is taxable amount payment

is VAT amount payment

Taxable amount payment	Consumer pays taxable amount to retailer
VAT payment	Consumer pays VAT amount to retailer Retailer pays balance VAT amount to state
Splitting agent	Retailer
Settlement of VAT	Payment calculated in VAT return Refund is requested in VAT return

Source: Deloitte

The overview of the current model is incomplete in the sense that it only presents the process for domestic supplies. Cross-border supplies of goods and services between taxable persons are derogations to this rule. These supplies (between the wholesaler and the retailer in the figure above) are generally zero-rated or reverse charged. Logically, a split payment model would not be applicable for these supplies, since there is no VAT to split under the current system.

A.3 Split payment models for transactions between taxable persons (B2B)

In this section, split payment models for transactions between taxable persons are examined. There are several possible designs for such a model. They differ mostly in the identity of the splitting agent and the use of blocked VAT bank accounts.

A.3.1 Possible Splitting Agents

Consulted stakeholders have highlighted that the **identity** of the splitting agent(s) is an **important** factor since it impacts to a great extent how the split payment would work.

From a theoretical perspective **three splitting agents** can be identified: the supplier (either wholesaler or retailer), the customer or an intermediary (such as banks, payment service providers or other agents). The models below discuss the possibilities of the split being carried out by these different agents.

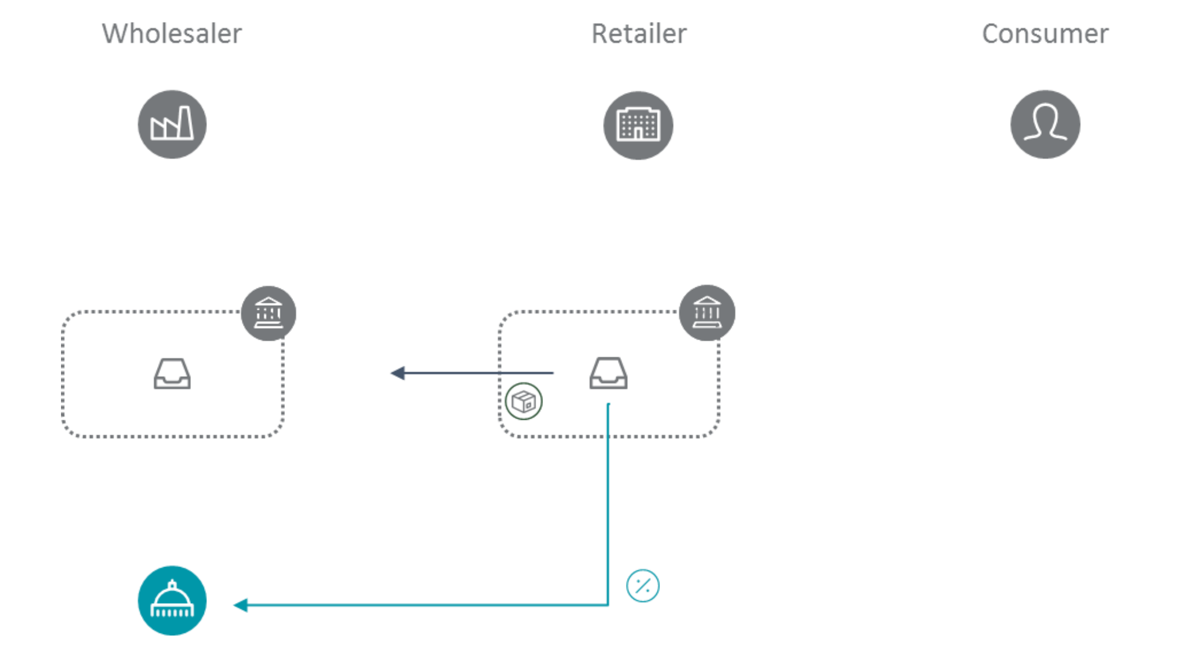
Model B: VAT is split out by the customer

In this model, the retailer, the customer in a B2B relationship (in our example the retailer), will initiate two payments, based on the information provided to him by the wholesaler (e.g. the information is mentioned on the invoice).

One payment will be the **taxable amount** , which the retailer will pay towards the **wholesaler**. The second payment is the **VAT amount** , which the retailer pays directly to the **tax authority**.

Figure 46: Model B - VAT split by the customer

Overview



Taxable amount payment	Retailer initiates payment of taxable amount from its bank separately from the payment of the VAT amount.
VAT payment	Retailer initiates a payment VAT amount from its bank
Splitting agent	The retailer (the customer)
Settlement of VAT	VAT has been paid directly to the tax authority A potential refund is requested in the VAT return

Source: Deloitte

The retailer, as the customer, has all the information on the specific transaction, as this data is mentioned on the invoice drawn up by the wholesaler.

A split by the customer in a B2B environment may create an information need, i.e. the need for the supplier to obtain confirmation that the VAT has been paid. This need is created if the supplier (i.e. the wholesaler) is still liable for VAT and therefore must and would want to be able to check the correct payment of VAT. A reconciliation is needed, because in this model the retailer initiates two separate payments himself and the wholesaler cannot be sure that the administration has received the (correct) VAT amount from the retailer. The tax administration will need to make the necessary data available for this reconciliation. However it could be considered whether it would be more appropriate to shift the VAT payment liability to the customer, as e.g. the supplier has no means to ensure the VAT payment by the customer. A reconciliation would be needed in any case, but then mostly for tax authority purposes.

From the retailer's perspective, he will have to initiate those two payments, which impacts its compliance burden. It also doubles the financial costs (transaction fees) for the retailer.

In addition, as the wholesaler's output VAT is paid directly by the customer (retailer), but his input VAT deduction is still settled through the VAT returns (which in case of split payment may be often in the credit situation), the efficiency of the domestic VAT refund mechanism would be crucial to the effectiveness of the mechanism.

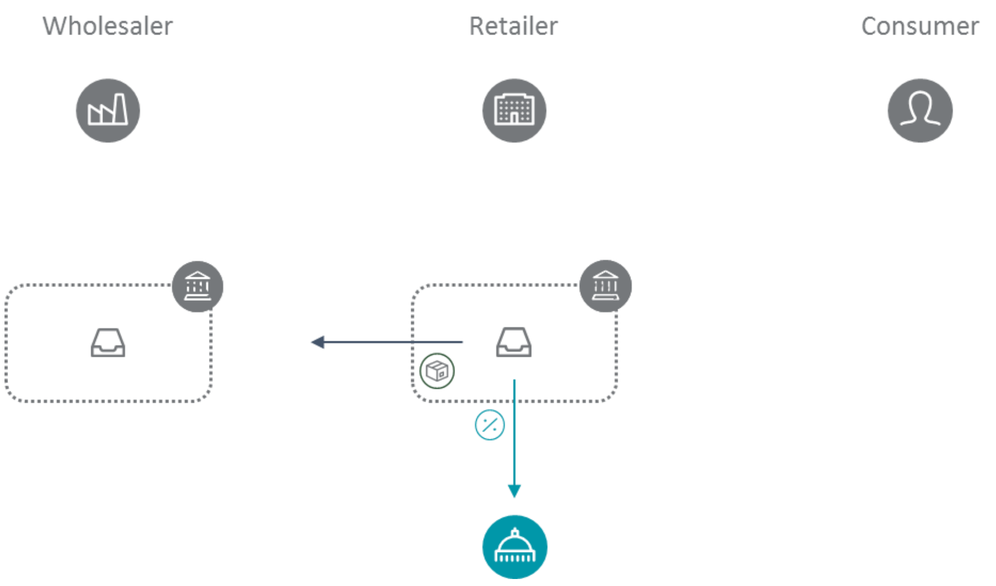
Current VAT regime

In the current VAT regime, a split by the customer (i.e. retailer) would be most viable on domestic B2B transactions, as these transactions are generally taxed. On intra-EU and domestic reverse charged supplies, no VAT is invoiced, thus no split for VAT purposes is required.

Reverse charged transactions are similar to a split being done by the customer. The main differences however between a split payment and a transaction subject to reverse charge is that the VAT liability differs (in reverse charge a customer would have the liability) and the VAT is not transferred to tax authority on transactional basis. In a split payment system, the supplier (wholesaler) may remain liable for the VAT (unless liability is moved to customer), though the payment is directly done by the retailer.

In the diagram, this would make a small, but noticeable difference regarding the liability on reverse charge (Figure 47):

Figure 47: Slight variation of Model B – reverse charge



Source: Deloitte

Note how this system might create a clear incentive to purchase goods cross-border in the current system, as this will limit any cash flow effects of slow refund procedures.

General reverse charge mechanism

In a general reverse charge mechanism (GRCM) the customer must account for VAT in its return on domestic transactions that exceed the threshold of EUR 10 000[164].

As there is no VAT charged on the supply, the customer in the relationship cannot split any payment. In practice the only difference between (i) a general reverse charge system without a split payment and (ii) a general reverse charge system with split payment, is that in (i) the VAT is accounted for in the return and in (ii) could be accounted/paid on a transactional basis. In other words, in (ii), the payment of VAT could be separated from VAT return and done sooner.

Definitive VAT regime

In the definitive VAT regime more supplies are taxed compared to the current VAT regime. Therefore, the split payment could apply to certain cross-border transactions as well as domestic transactions.

As the place of taxation can now be in any Member State of the EU, potentially 28 different VAT regimes could apply. In a split payment, the customer would pay the split VAT to its home Member State (i.e. the Member State of destination), but the supplier (who is still liable for VAT), if based elsewhere will need to declare the supplies, as well as the VAT payable by the customer, through a one-stop-shop system to the authorities in the Member state of destination, to enable a verification by tax authority whether payment has been executed on the right account and make reconciliations. As in current system, a shift of VAT liability to customer could be considered.

A well designed refund system will be as imperative as in the current system, or even more so.

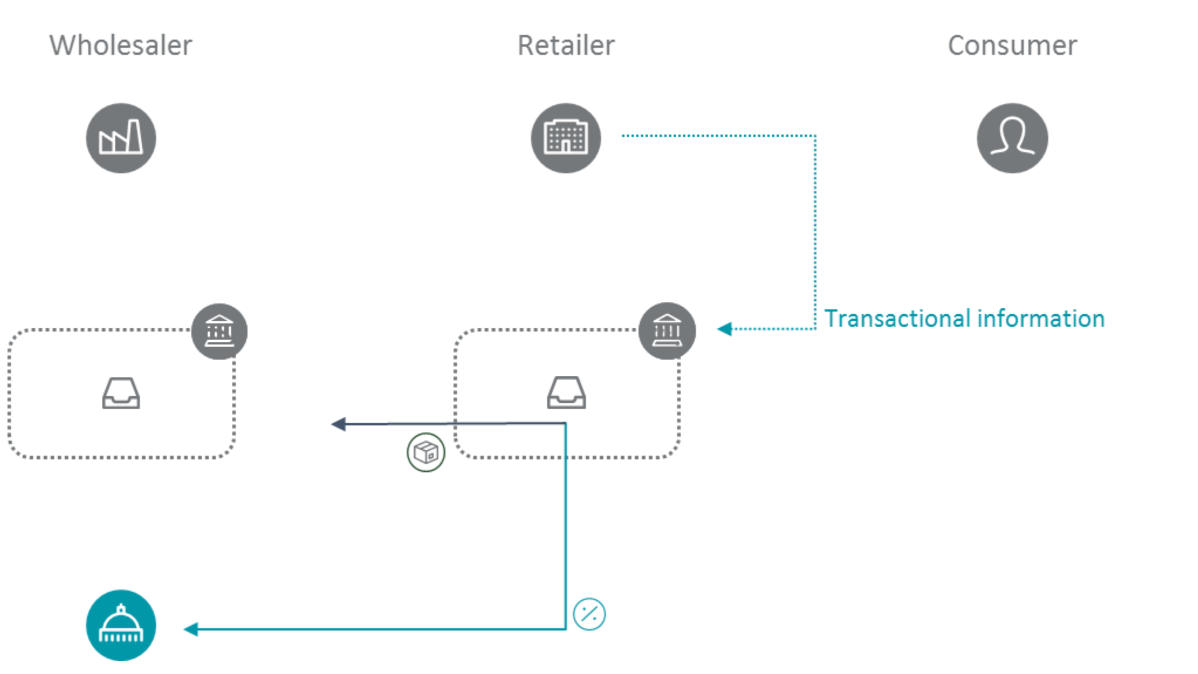
Model C: VAT is split out by an intermediary (bank or financial institution)

Within this model, an intermediary, the **bank** or another financial institution or payment processor, will split a VAT inclusive payment from **the retailer** towards **the wholesaler**. This payment is split in a taxable amount payment towards the supplier and a VAT payment towards the tax authority. Such model is used in some existing international examples, see section 4.3.

[164] Based on the Commission proposal for GRCM derogations COM(2016)811

Figure 48: Model C – VAT split by an intermediary (bank/financial institution)

Overview



Taxable amount payment	Retailer initiates a single payment with its bank which splits the payment based on info provided by the retailer
VAT payment	Bank splits VAT amount to authorities based on transactional info of the retailer
Splitting agent	The bank or financial institution of the retailer
Settlement of VAT	VAT has been paid directly to the State A potential refund is requested in the VAT return

Source: Deloitte

The bank or the financial intermediary does not necessarily have all of the information to be able to split the payment. Thus, **information would need to be provided** to it by the retailer on the VAT amount (or proportion) of the payment. With this model, there may be a need therefore for the development of a universal standard for the exchange of information.

In terms of the **compliance burden**, a split by a bank or financial institution intermediary in a B2B environment would still require that the supplier has certainty that the VAT has been paid, as he is still liable for said VAT. The tax administration or the bank or financial intermediary will need to make the necessary data available for this reconciliation.

From the retailer's perspective, one VAT inclusive payment will have to be initiated (as in the current regime). However, although this system is simpler in the sense that only one payment by retailer is required, it also requires the retailer to inform the intermediary of the VAT amount. It requires also certain actions on the level of the intermediary, mostly the ability to process the received transaction data, link it to the payment and split the payment.

To provide the information necessary for splitting the payment, the retailer (or wholesaler) could provide the intermediary (bank) with an e-invoice, but then the link between payment and invoice still needs to be made and data protection concerns could be raised regarding sharing any personal data, such as individual's address, which are covered by data protection legislation[165]. Sharing commercially sensitive data may also raise concerns.

Regarding **costs**, the fact that banks will split the payment will most likely trigger additional financial transaction costs.

The intermediary will require information on the proportion of VAT to be paid to make the correct split. This will create **complexity**. For example different VAT rates could be applicable for one single payment.

Current VAT regime

With no VAT charged on intra-EU and domestic reverse charged supplies, **only domestic transactions** would be split. This has the advantage that only **one** single **place of taxation** is to be considered.

It is important to note though that payments are not necessarily carried out by the banks in the Member State where the transactions takes place. If two German accounts are used to pay for a transaction that takes place in Denmark, the German bank of the retailer needs to transfer the VAT amount towards the Danish authorities and not the German authorities. The payment could also be executed by a non-EU bank. The impacts and risks it created would need to be further assessed.

For this reason, information on the place of supply or at least the correct tax authority's account is a necessity. The availability of this information towards the intermediary might be seen as problematic from a commercial and data protection point of view[166].

As above, an effective refund system is of great importance.

Note that this system might create a clear incentive to supply goods cross-border, as this transaction might be simpler than a domestic transaction subject to a split payment.

General reverse charge mechanism

As above, regarding any type of supplies - domestic, cross-border or exempted, a split payment in a GRCM environment is not considered possible. There is also no incentive towards preferring cross-border over domestic transactions as all transactions would be treated in the same way, as is the case in a general reverse charge system.

[165] Depending on the type of data that would be shared with the intermediary, any sharing of an individual's data must be in line with data protection regulations, notably the General Data Protection Regulation (EU) 2016/679 (GDPR). Furthermore, the regulation sets only minimum standards and Member States may also have additional measures in place which would also have to be taken into account. The GDPR will apply as of 25 May 2018 after a two-year transition period.
[166] ibid

Definitive VAT regime

When both cross-border and domestic supplies would be taxable and thus payments could be split, the difficulty of identifying the place of supply must be taken into account. The place of supply will determine which Member State is entitled to the VAT payment. A supplier will thus be confronted with a multitude of potential Member States to follow-up on its liability.

It is also much more likely that banks of other Member States or non-EU banks will be involved.

Although, like in the current system, the place of supply would have to be identified and non-domestic banks could be used, the number of options and therefore possible errors in cross-border trade increases.

The retailer needs to inform the intermediary of the correct tax authority account details to be used, but as stated before this and provision of transaction data may raise the same data protection issues.

An effective refund system (whether is it based on a VAT return or cross-border refund claim) will be as imperative as in the current system, or even more so. Depending on the type of purchases of the supplier, the balancing of the domestic VAT might result more likely in a credit position (if the supplier has a lot of intra-EU purchases).

In the definitive regime, there is less bias to supply cross-border, since more transactions are treated equally (except supplies to Certified Taxable Person), as is the case in a GRCM.

General consideration on the compatibility of the model with the SEPA regulation

As covered in section 5.1.4. It is likely that under existing SEPA legislative framework applying to banks and other financial institutions and payment service providers, it is not possible for a Retailer to initiate a single payment with its bank, which would split the payment based on info provided by the Retailer. Retailer would need to immediately provide explicit instructions for two separate payments.

Model D: VAT is split out by an intermediary (other than bank or financial institution)

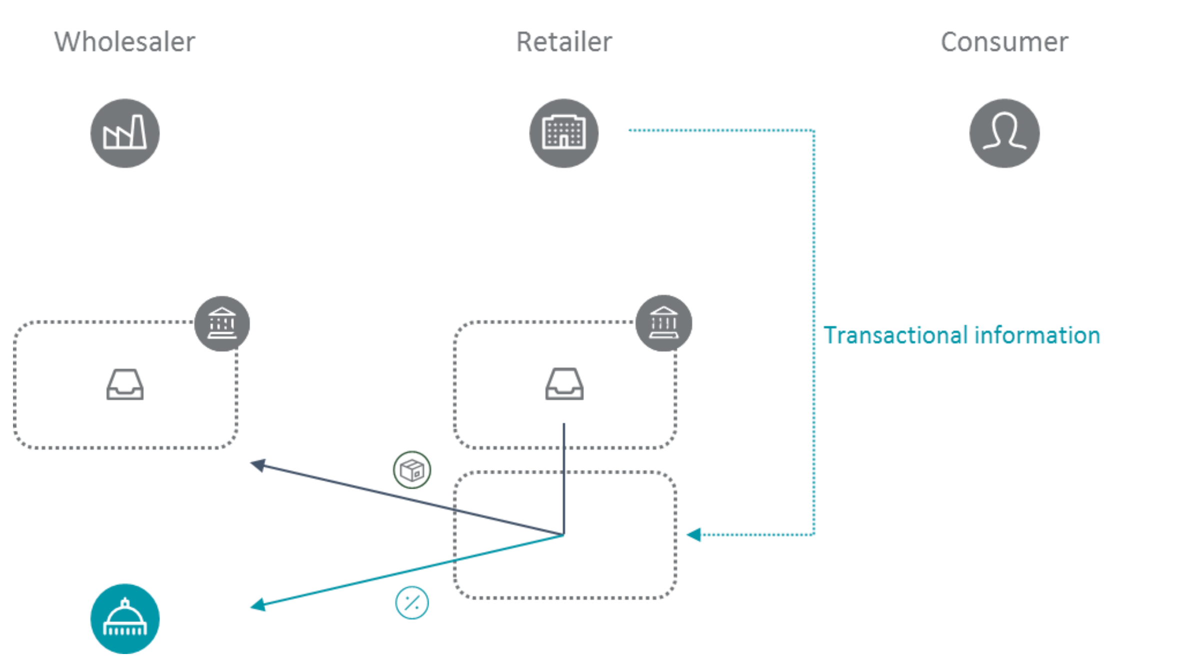
In this model, another intermediary (e.g. payment service provider not covered by SEPA or specific entity splitting VAT), will split a VAT inclusive payment from the retailer to the wholesaler.

This payment is split in two: a payment of the taxable amount towards the supplier and a payment of the VAT towards the authorities through the intermediary.

In contrast to a bank acting as an intermediary, some businesses may prefer trusting an independent intermediary with their transactional data or even compliance needs. The flow of information could therefore be adjusted to the specifics of the taxable person at hand and their existing IT systems. There is not necessarily a need to for a universal standard of information, which would probably be the case if a bank was the intermediary.

Figure 49: Model D - VAT split by an intermediary (not bank/financial institution)

Overview



Taxable amount payment	Retailer initiates a single payment with its bank towards the intermediary, which splits the payment based on information provided by the retailer
VAT payment	Intermediary splits VAT amount to authorities based on transactional information by retailer
Splitting agent	The intermediary
Settlement of VAT	VAT has been paid directly to the tax authority A potential refund is requested in the VAT return

Source: Deloitte

The intermediary does not already dispose of all information necessary to be able to split the payment. Thus, information would have to be provided to it by the retailer on the VAT amount (or proportion) of the payment.

A split by an intermediary in a B2B environment would still require that the supplier is certain that the VAT has been paid, as the supplier may still be liable for said VAT. The tax administration (or the intermediary) will need to make the necessary data available for this reconciliation.

From the retailer's perspective, just one VAT inclusive payment would have to be initiated. Though this system is indeed simpler in the sense that only one payment is required, this system also requires the retailer to include information on the VAT amount. The retailer could provide the intermediary with an e-invoice or other transactional data. However, then the link between payment and invoice still needs to be made and data protection concerns could be raised (although as in this case the intermediary is contracted by retailer, which can provide necessary security).

Regarding **costs**, the fact that an extra service will be required to split a payment, will likely trigger increased transaction costs.

When there is **trust** (e.g. based on a contract) in the relationship between the intermediary and the retailer, there is a possibility of reducing or even eliminating the need for extra information in the transfer details at least. The retailer can provide an intermediary with its e-invoices or even give the intermediary direct access to its ERP-system. The VAT amount can be determined by the intermediary based on the information provided by the retailer.

Finally, it is important to note that **liability** could be an issue. Based on the input received from consulted stakeholders, businesses (in role of intermediaries) may be wary of assuming liability for the correct payment of VAT.

Further, taking into account the importance of the information enabling a payment to be split, in absence of this information, it would be difficult to hold an intermediary responsible for VAT if it had correctly executed the split based on the information provided to it. An intermediary does not produce the data needed, nor can it verify the correctness of the information. Therefore, it is logical that no liability can be shifted towards the intermediary other than correctly splitting the amount based on the information provided.

Current regime

No differences with model c.

General reverse charge mechanism

No differences with model c.

Definitive regime

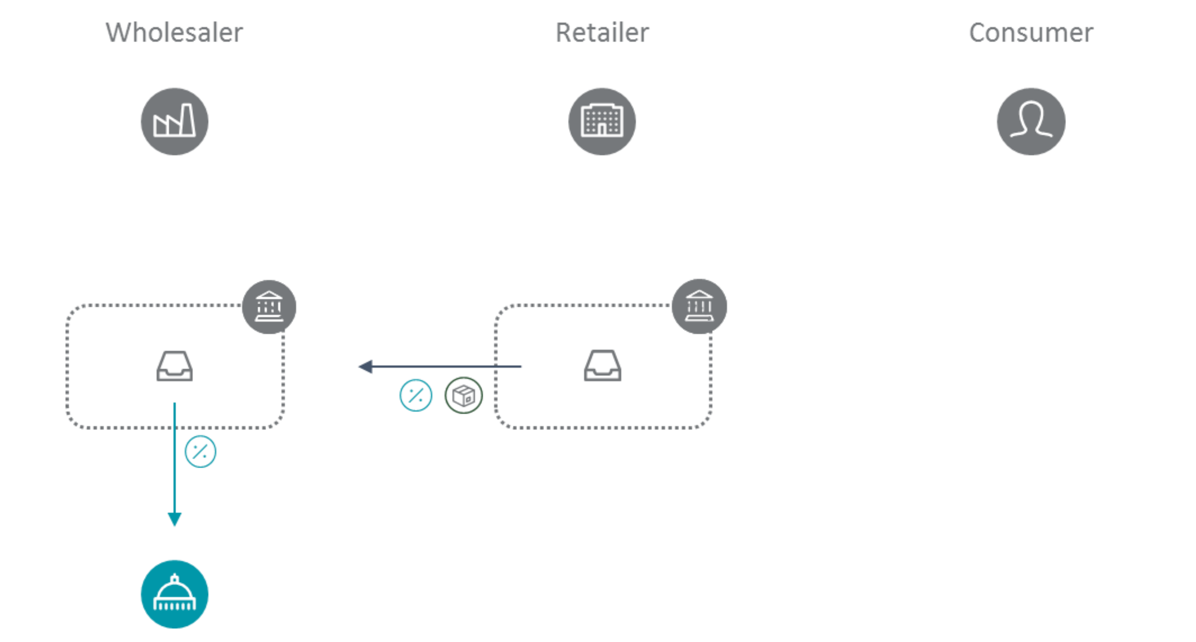
No differences with model c.

Model E: VAT is split out by wholesaler

This model is very similar to the current VAT model (without any split payment in place). In a first action, the retailer pays a VAT-inclusive amount towards the wholesaler. In a second action the wholesaler pays the VAT amount towards the tax authorities. The difference between the current system and a split payment system, is that the wholesaler could transfer any VAT directly towards the administration at the moment of receipt of the payment or at least close to it. The wholesaler would not be able to balance an amount in its return first.

Figure 50: Model E – VAT split by the wholesaler

Overview



Taxable amount payment	Retailer initiates a single payment with its bank for the taxable amount with VAT included.
VAT payment	Wholesaler splits VAT amount to authorities based on transactional information it already has as the supplier
Splitting agent	The wholesaler
Settlement of VAT	VAT has been paid directly to the tax authority A potential refund is requested in the VAT return

Source: Deloitte

The wholesaler has all information on the specific transaction and therefore all information needed to split the payment. There is no risk of data protection issues.

For the supplier, the amount of payments would increase as the VAT will have to be paid towards the administration on a transactional level (instead of solely receiving payments from his customer and consolidating these in the VAT return).

This system however is still very fraud sensitive, similarly to the current system. The supplier still receives the VAT amount, and although the timeframe in which a supplier (a missing trader) could transact without any VAT payments will be greatly reduced, it is not eliminated.

A.3.2 Model with blocked VAT bank account

As a reminder, a blocked VAT bank account is defined as an account in which only VAT amounts are paid and received and which is potentially under the direct control of the tax administration. In this account, a supplier receives the output VAT from all its customers. The taxable person can also use this account to pay for its input VAT.

Blocked VAT bank accounts were designed in 2010 PwC study as a concept to limit the negative cash flow impact for businesses in split payment models (where refunds are not quickly processed). As refund procedures normally take some time, businesses would accelerate the payment of output VAT, but due to delay in input VAT refunds, there is indeed a negative impact on cash flow.

The blocked VAT account could be arranged either through existing banks (a specific bank account) or through the tax administration (a specific taxpayer VAT account), depending on the procedure set up, as long as it is practically possible to access the funds on the account for input VAT payments as a taxable person. Direct debit mandates for the administration to retrieve the VAT amount might apply in cases where the blocked VAT bank account would be established with a bank.

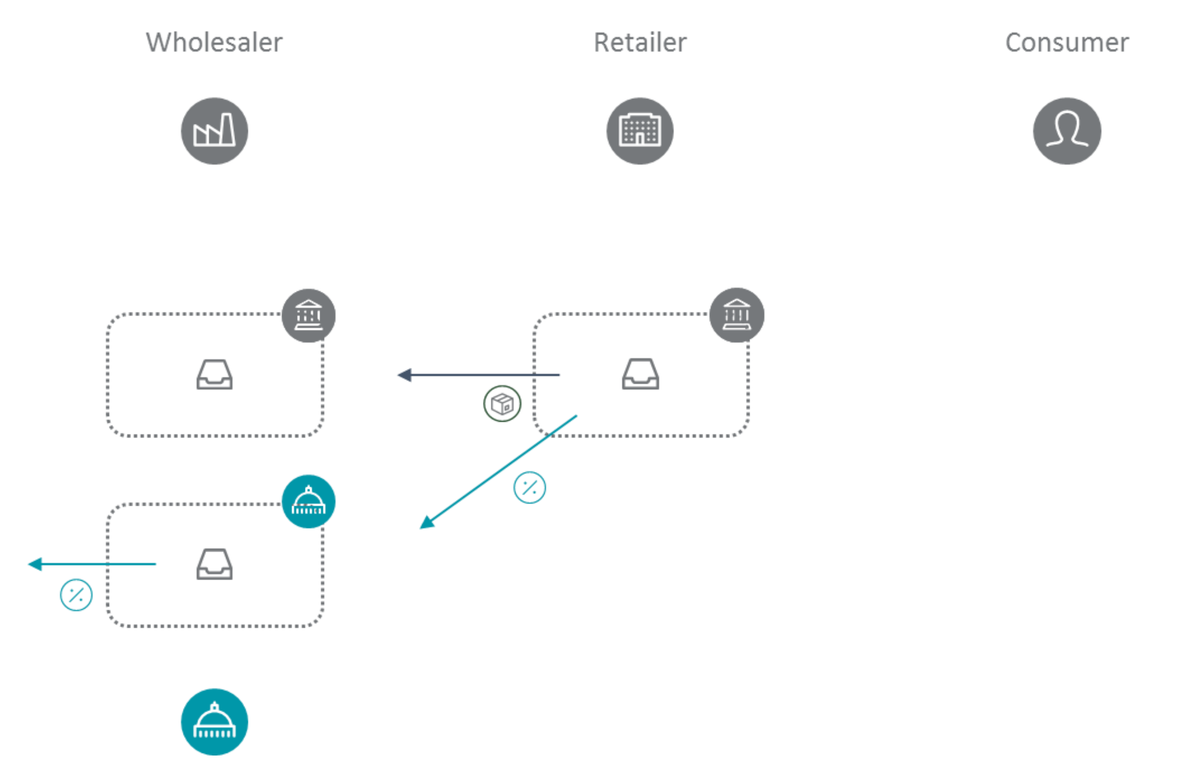
Model F: A blocked VAT bank account of the wholesaler

In the model below (

Figure 51) a retailer would pay the VAT amount towards the VAT blocked VAT bank account of its supplier (wholesaler). The taxable amount is paid towards the regular bank account of the supplier. The model in the diagram below is completed with a split payment by the customer (retailer).

Figure 51: Model F – Customer split payment with blocked VAT account of the wholesaler

Overview



Taxable amount payment	Retailer initiates payment of taxable amount from its bank separately from the payment of the VAT amount.
VAT payment	Retailer initiates payment of VAT amount from its bank, or Retailer initiates payment of VAT amount from its personalised blocked account if funds are sufficient
Splitting agent	The retailer
Settlement of VAT	VAT has been paid from blocked VAT account to the tax authorities based on VAT return (or direct debit by tax authority) Output and input VAT are balanced on the VAT return, as in current system

Source: Deloitte

Designing a split payment with a blocked VAT bank account would entail great complexity. For the taxable person, it means potentially doubling the time for managing of their accounts by having one regular bank account and one blocked VAT bank account (potentially per Member State, i.e. 28 accounts). In addition, the VAT bank account would be used on a transactional basis in combination with the current bank account, even part of the (input) VAT amount may need to come from the current account in case of insufficient balance on VAT bank account.

Additionally, and similar to the other split payment models with intermediary involved, a transfer of information would have to occur between retailer/wholesaler and the intermediary.

Up until this point, it has been assumed that there would only be one regular bank account for each Member State. However, in a blocked VAT bank account system there would need to be two accounts, which are used on transactional basis. The system is very prone to (human) errors because of the number of bank accounts and transfers. This raises questions on the verification of accounts and on rectification of any payments towards the wrong account. An automatic system to check the correctness of these account details would be necessary, as well as a way to communicate the necessary information between the parties (e.g. through software or the ERP). The set-up of such a system could prove costly.

On the financial aspects of blocked VAT bank accounts, it is to be noted that the managing of all accounts might be costly for businesses (and/or tax administration). Of course as with other models above, the number of transactions would increase, creating additional compliance costs.

Current VAT regime

This model is essentially the same as with the current regime where a split payment mechanism is applied. However, with the blocked VAT bank account, the refund system is of less relevance since the received output VAT payments can be used to pay for input VAT payments.

Nevertheless, the system does not solve the cash flow problem completely. Output VAT is still transferred towards the blocked account and cannot be used for any other purpose then input VAT payments. The cash is already assigned a specific purpose, meanwhile it cannot be used for any non VAT purposes.

As in the current regime models, there may be an incentive to start selling or purchasing cross-border, as no split payment applies on these transactions.

General reverse charge mechanism

The introduction of a blocked VAT bank account in a general reverse charge mechanism is superfluous since there is no VAT to be split.

Definitive VAT regime

In the definitive regime the most practical problem will be the (potentially) large amount of blocked VAT bank accounts. Not only will every taxable person have a blocked account in its Member State of establishment, but also in every Member State where it trades and has any VAT obligations.

A.3.4 Payment type possibilities

Although not specifically building blocks of any split payment model, it is important to discuss different payment methods. Applying a split payment for certain payment methods may impact any other payment methods.

As mentioned previously, the main payment methods discussed are: EFT, card payments, cash and ePayments. Cash is the most distinct of these methods since using cash involves a physical transfer of the funds on site from the customer to the supplier and the others do not.

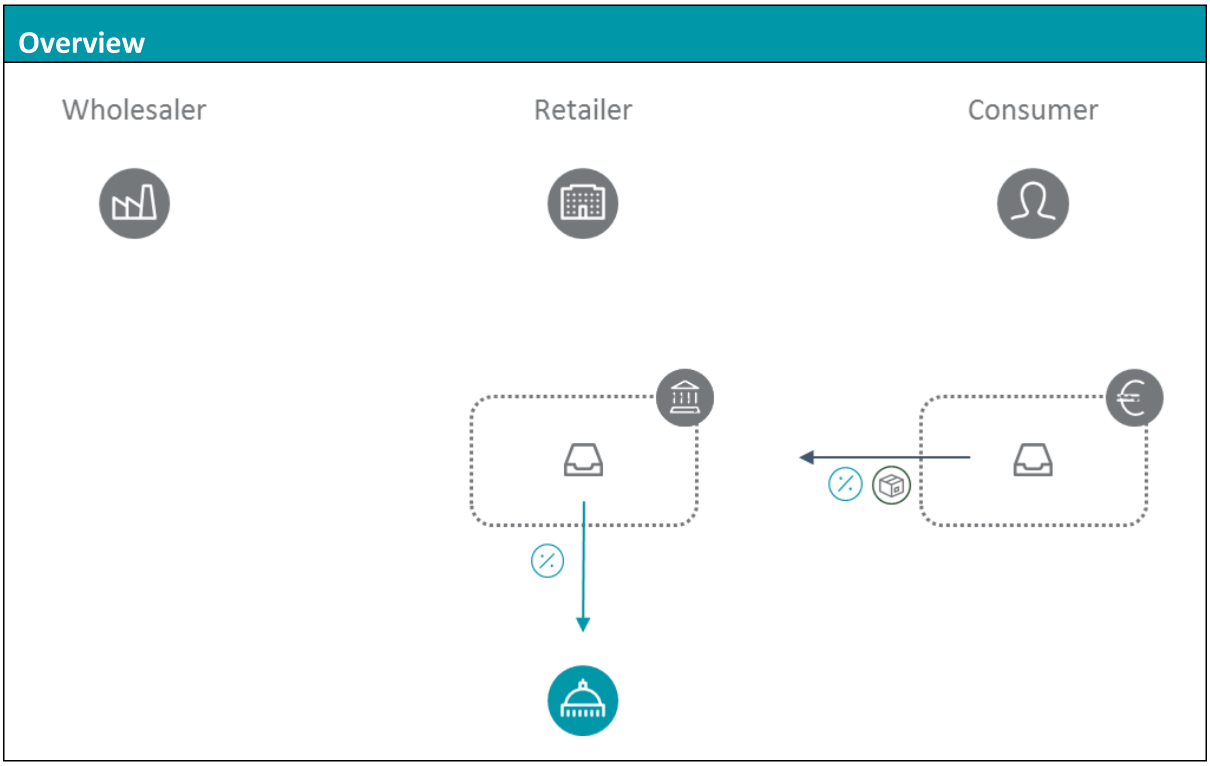
In non-cash payments, since third parties are involved in the payment process (i.e. through a payment terminal or processor), there is theoretically a way to intervene in a payment from a distance and split the payment. There is also a way to automate the splitting process. With cash-like payments, since no third party is involved, the intervention of the supplier or the customer is required to split the payment.

Other elements (such as e.g. payment with vouchers, barter transactions etc.) could further complicate a split payment mechanism.

Different splitting methods for different types of payments, could create incentives to start using another payment method where split payment is not applied. For example, when no split payment would apply to cash transactions, this might create a stimulus for businesses to encourage their clients to pay in cash or even oblige them to do so to avoid split payment, especially in B2C environment.

Model G: Cash (like) payments (non-EFT payments)

Figure 52: Model G - Cash (like) payments split



Source: Deloitte

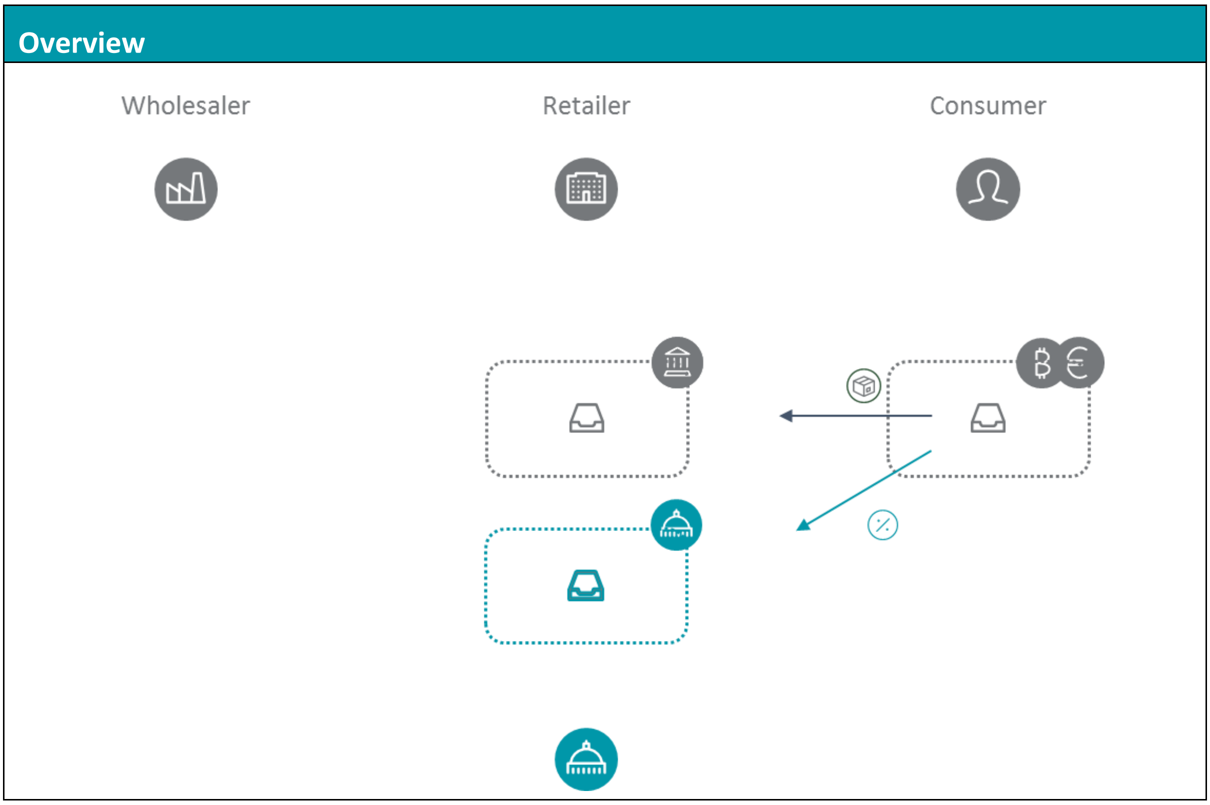
As stated above, from a practical point of view it is complicated if not impossible to split cash-like transactions. The VAT amount is physically available to the wholesaler, which removes the possibility to split the VAT before it is available to them. It is difficult in practice to ensure that the VAT amount accrues to the tax authority.

Although there are alternatives, these do not amount to actually splitting the VAT. For example, the supplier (here wholesaler, but more likely retailer in a B2C transaction) could be obliged to use registered accounting or specific cash register software (as in use in the restaurant sector in Belgium). This could help ensure that authorities are aware of the sale and the correct amount of VAT to be transferred to them. Possibly, a system could even be set up that transfers the VAT automatically to the VAT account. Problems could still arise however if the account of the supplier does not have sufficient funds when the VAT amount is debited. More likely, the supplier could be obliged to make such VAT payments not transactional basis (as in model E above), but near real time (e.g. daily).

Cash payments will always be a special case in these systems, although for example a use of certified cash registers may be used to support a measure. Omitting cash payments from the split payment, could however push suppliers to incentivise the increased use of cash. This way, some of the negative consequences of the split payment mechanism (e.g. reduced working capital), can be overcome. However, there are also other factors to be taken into account, such as ease of use and national limits on cash payments.

Model H: Other non-EFT payments (excluding cash)

Figure 53: Model H – non-EFT payments



Source: Deloitte

Other forms of non-cash payments, such as Paypal, eWallets, digital currencies like bitcoin etc. are conceptually similar to EFT payments for this study.

In some aspects these payment methods might be easier to be split. As noted above, the impact of SEPA regulations on EFT payment is quite important and the limitations of the regulations are extensive. Other payment methods may not have these limitations which can favour intermediaries offering these payment methods. At the moment, some of these services already split off a commission for each payment. VAT splitting would therefore just be an extension of the already existing system.

A.4 Split payment models for transactions between taxable persons and government entities or final consumers (B2G and B2C)

As with transactions between taxable persons, there are several possible solutions for a split payment mechanism in a B2G and B2C environment.

B2G and B2C split payment models are different from the B2B models, since in a B2G and B2C environment, supplier is facing final consumers.

These models tend to differ somewhat in their practical application and regarding the B2C models more specifically their feasibility. Indeed, it is less evident to require much intervention from the individual customer, since it is much less equipped to do so.

Very important to note is that for B2G and B2C supplies there is no difference between the current regime and the GRCM. The reason is that (by assumption) the GRCM only applies in a B2B environment. Thus, for B2G and B2C supplies, the applicable VAT treatment remains the same in the current VAT regime and the GRCM.

For domestic transactions and cross-border transactions, the **treatment also does not change between the current VAT regime, the GRCM and the definitive VAT regime**. Based on the current distance sales regime, B2C transactions taxable by a business in a Member State of destination exceeding a threshold defined by the Member State of arrival (usually EUR 35 000 to EUR 100 000), or opting to apply the VAT in the Member State of arrival, are subject to VAT in the Member State of arrival.[167]

Today, cross-border transactions in a B2C environment are quite complex and practical issues of the application of a split payment on these transactions can already be presumed. Applying a split payment on these transactions would add complexity since customer and supplier are not situated in the same Member State. The number of these transactions subject to VAT in the Member State of destination will increase further, when the recent Commission proposal is be adopted to abolish distance sales thresholds.[168]

Regarding taxation of cross-border B2C services, these are also already largely taxed at the Member State of consumption (such as country of the customer).[169]

As for B2G purchases, the customers today should already remit VAT on the intra-EU acquisition of goods, or the purchase of services from abroad. For the intra-EU acquisitions, a threshold of minimum EUR 10 000 applies in the Member State of arrival of the goods[170].

Since the VAT which they remit is not deductible, in essence this amounts to a split payment of the VAT, triggered by the shift in the liability to remit the VAT to the tax authority. This is

[167] Article 44 of the VAT directive 2006/112/EC.
[168] European Commission, Proposal for a Council Directive amending Directive 2006/112/EC and Directive 2009/132/EC as regards certain value added tax obligations for supplies of services and distance sales of goods, COM/2016/757.
[169] Such as e-services based on Article 58 of the VAT Directive 2006/112/EC
[170] Article 3 of the VAT directive 2006/112/EC.

usually paired with the filing of a special declaration by the customer in B2G transactions. Public bodies which have already a VAT registration number for their intra-EU purchases, could use this registration also for domestic split payment purposes.

In the definitive VAT regime the cross-border B2G transactions (whether goods or services) may become taxed. In this case potentially, the B2G customer will no longer have to file a special return.

As with the B2B models above, the sub-sections below explain first the possible splitting agents in a B2G or B2C environment. Models of split payment with a blocked VAT bank account are then explained followed by the application regarding different payment methods.

A.4.1 Possible splitting agents

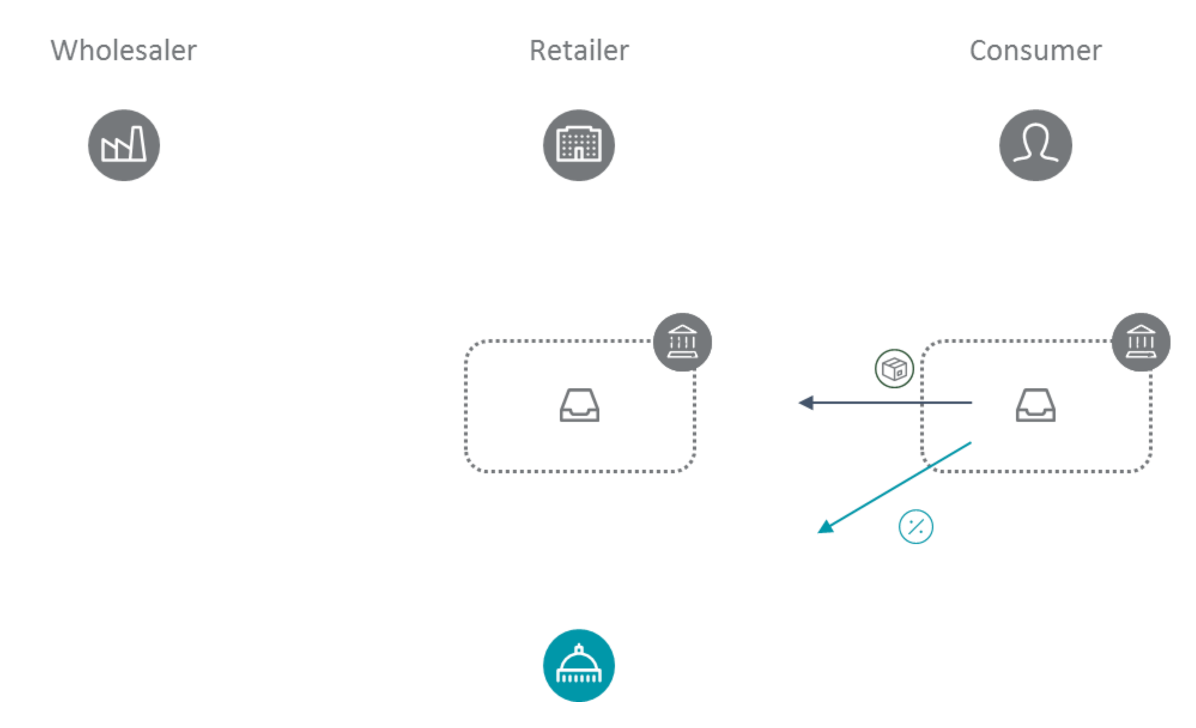
From a theoretical perspective, three splitting agents can be identified: the customer, the intermediary (banks etc.) or the supplier. In the models below these different splitting agents will be used.

Model I: VAT is split out by customer

In this model, a customer (consumer) pays the VAT amount and the taxable amount separately. The first is transferred towards the tax authorities and the second towards the retailer.

Figure 54: Model I - VAT split by the consumer (B2G/B2C)

Overview



Taxable amount payment	Consumer initiates payment of taxable amount from its bank separately from the payment of the VAT amount.
VAT payment	Consumer pays directly to the tax authority
Splitting agent	The consumer
Settlement of VAT	VAT has been paid directly to the tax authority A potential refund is requested in the VAT return

Source: Deloitte

Like in B2B transactions, the customer in the relationship (in this case, the consumer), can split the payment, since it has all information needed to be able to split the payment (e.g. this information would be on the invoice). However, VAT invoicing may not be used on B2C transactions, in which case final consumer may also lack the suitable information.

The split payment could be set up in different ways. First, the consumer could literally pay twice (double payment). Second, a consumer could instruct a payment with a payment message splitting the payment.

It is also of great importance to consider how any refunds are paid out (e.g. in case of credit notes). This is especially relevant in the case of returning goods. In a B2C and B2G context, a special correction mechanism should be set up.

Since consumers are paying directly to the tax authority, it could be (at least theoretically) possible that the tax authority directly refunds the consumer. The retailer would thus not refund the VAT unless it recovered it prior to the refund.

In a B2G context, accounting and software systems are mostly used. Therefore, this might offer the possibility to make use of integrated solutions to reduce the administration needed to account for VAT on the consumer side (e.g. certain e-invoices). In this regard B2G is more similar to B2B than it is to B2C.

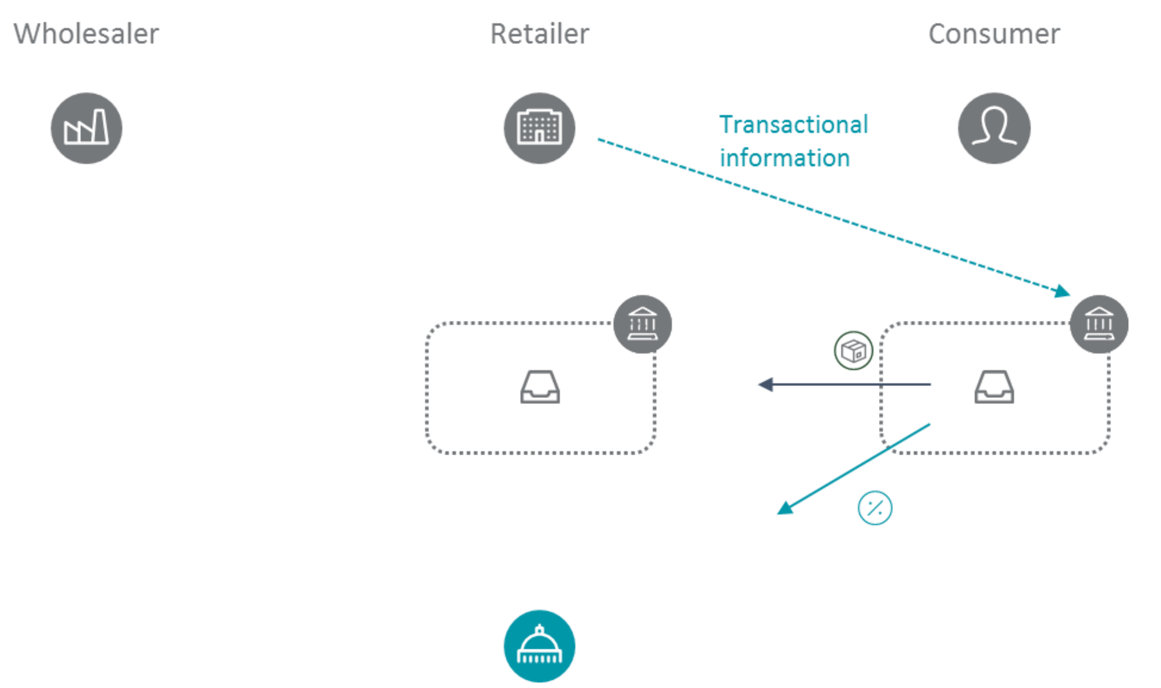
As a conclusion, today it is very difficult to designate the customer as splitting agent in a B2C transaction due to potential lack of underlying information as well as poor compliance control possibility. In B2G transaction it is possible, although may be slightly challenging for some public bodies, which have currently no VAT obligations.

Model J: VAT is split out by an intermediary (bank or other financial intermediary)

In this model, an intermediary, namely the bank or another financial intermediary, will split a VAT inclusive payment from the consumer towards the retailer. This payment is split in a taxable amount payment towards the supplier and a VAT payment towards the tax authority.

Figure 55: Model J - VAT split by financial intermediary (B2G/B2C)

Overview



Taxable amount payment	Consumer initiates a single payment with its bank which splits the payment based on information provided by the retailer.
VAT payment	Bank of the consumer splits VAT amount to authorities based on transactional information of the retailer
Splitting agent	The bank consumer
Settlement of VAT	VAT has been paid directly to the tax authority A potential refund is requested in the VAT return

Source: Deloitte

Previous remarks with respect to VAT being split by a bank or financial intermediary in a B2B context (Section 0) are also valid in a B2C and B2G context. Thus, the intermediary will require the communication of certain information from both the supplier and the customer.

If the VAT liability remains with the supplier, a need for reconciliation remains and the tax authority will need to provide the necessary information to make this reconciliation possible.

Note that this system might create a clear incentive to sell goods cross-border, as it may be simpler, where cross-border supplies are not covered by split payment (however, may have other additional VAT obligations, such as MOSS). It may also provide an incentive to purchase cross-border (subject to reverse charge), in order to limit any cash flow effects of slow refund procedures.

In this scenario, a special consumer refund scheme may be needed.

Model K: VAT is split out by an intermediary (other than a bank or a financial institution)

In this model, an intermediary (other than a bank or a financial institution), will split a VAT inclusive payment from the consumer towards the retailer.

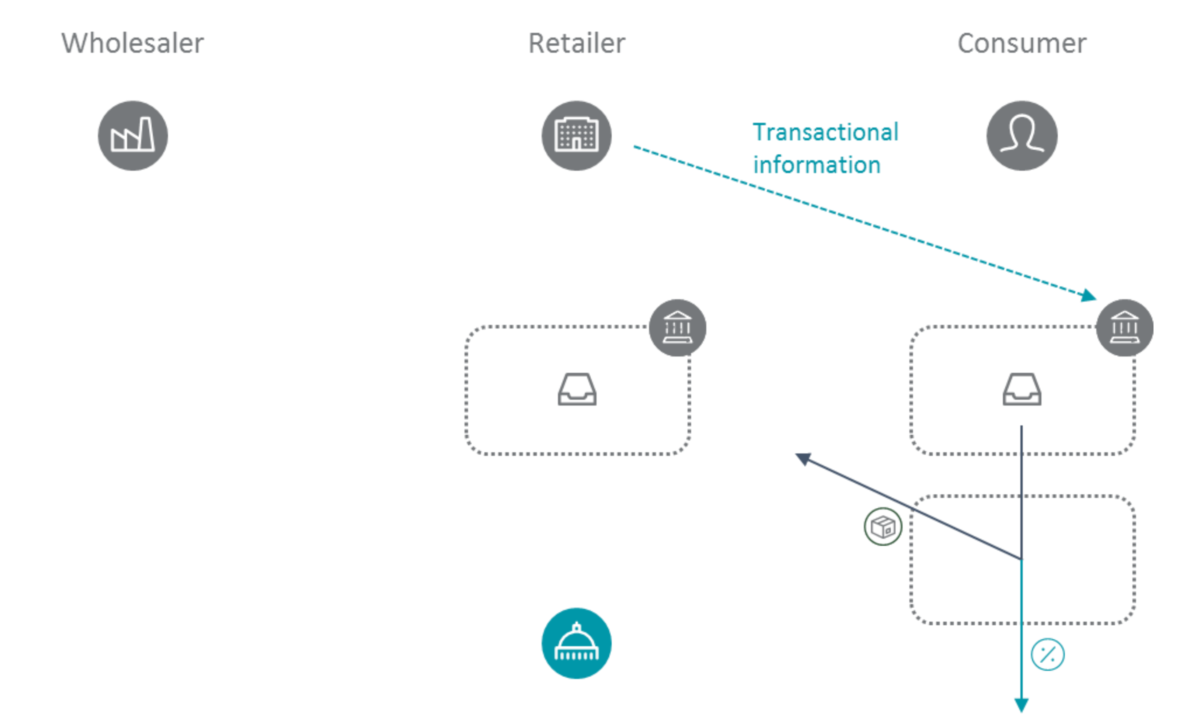
This payment is split in a taxable amount payment towards the supplier and a VAT payment towards the tax authority. The VAT liability remains with the supplier (retailer), although a shift to customer could be considered in case of B2G transactions.

Retailers and consumers will have to entrust the intermediary with their transactional data. The flow of information could therefore be adjusted to the specifics of the taxable person at hand and its existing computer systems.

In a B2C environment though, there will be no possibility to reconcile with the customer's data, since they would not have any accounting or software infrastructure in place.

Figure 56: Model K - VAT split by non-financial intermediary (B2G/B2C)

Overview



Taxable amount payment	Consumer initiates a single payment with its bank towards the intermediary, which splits the payment based on information provided by the retailer.
VAT payment	Intermediary splits VAT amount to tax authority based on transactional information by retailer
Splitting agent	The intermediary
Settlement of VAT	VAT has been paid directly to the tax authority A potential refund is requested in the VAT return

Source: Deloitte

As the VAT liability remains with the retailer, a need for reconciliation remains and the administration will need to provide the necessary information to make this reconciliation possible.

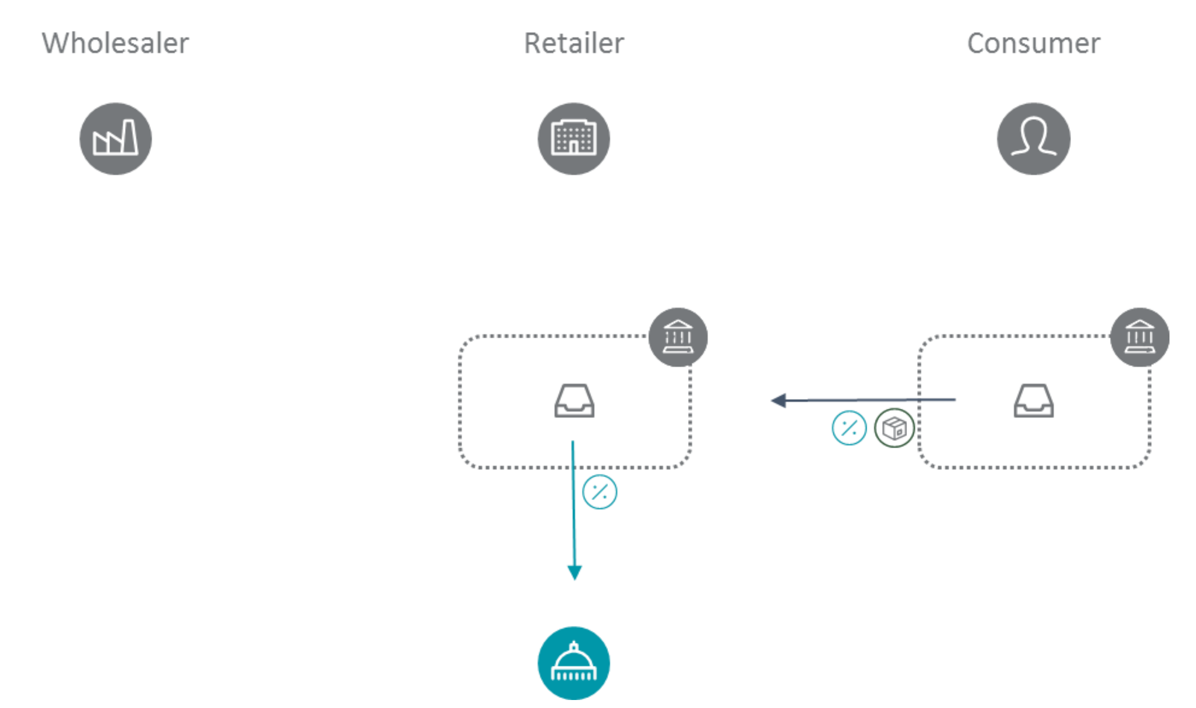
As above, this system might create an incentive to purchase goods cross-border in the current system (if cross-border supplies are not covered by split payment), as this will limit any cash flow effects of slow refund procedures. It could also provide an incentive to sell goods cross-border since the VAT treatment is simpler.

Model L: VAT is split out by supplier (retailer)

This scenario is very similar to the current VAT model (without any split payment in place). The customer pays an amount VAT included towards the retailer. In a second stage the retailer pays the VAT amount towards the tax authority. The difference between the current system and a split payment system, is that the retailer could transfer any VAT directly towards the tax authority at the moment of receipt of the payment or at least close to it. The retailer would thus not able to balance an amount in its return first.

Figure 57: Model L - VAT split by the retailer

Overview



Taxable amount payment	Consumer initiates a single payment with its bank for the taxable amount with VAT included.
VAT payment	Retailer splits VAT amount to tax authority based on its own transactional data
Splitting agent	The retailer
Settlement of VAT	VAT has been paid directly to the tax authority A potential refund is requested in the VAT return

Source: Deloitte

All considerations we have noted in a B2B context are applicable also in a B2C and B2G context. The retailer has all information on the specific transaction and therefore all information needed to split the payment.

For the retailer, the amount of payments would increase, as the VAT will have to be paid towards the tax authority on a transactional level (or near real time, e.g. daily).

This system however is still fraud sensitive. The supplier still receives the VAT amount, and although the timeframe in which a supplier (a missing trader) could transact without any VAT payments will be greatly reduced, it is not eliminated. Some additional obligations may help to increase compliance, such as certified cash registers in shops. On online sales, an obligatory e-invoicing may help, however it is likely to be disproportionately burdensome on B2C sales, which has currently very limited invoicing obligations.

This model may therefore not be a very viable solution, however regarding B2C supplies, it may be technically the only option.

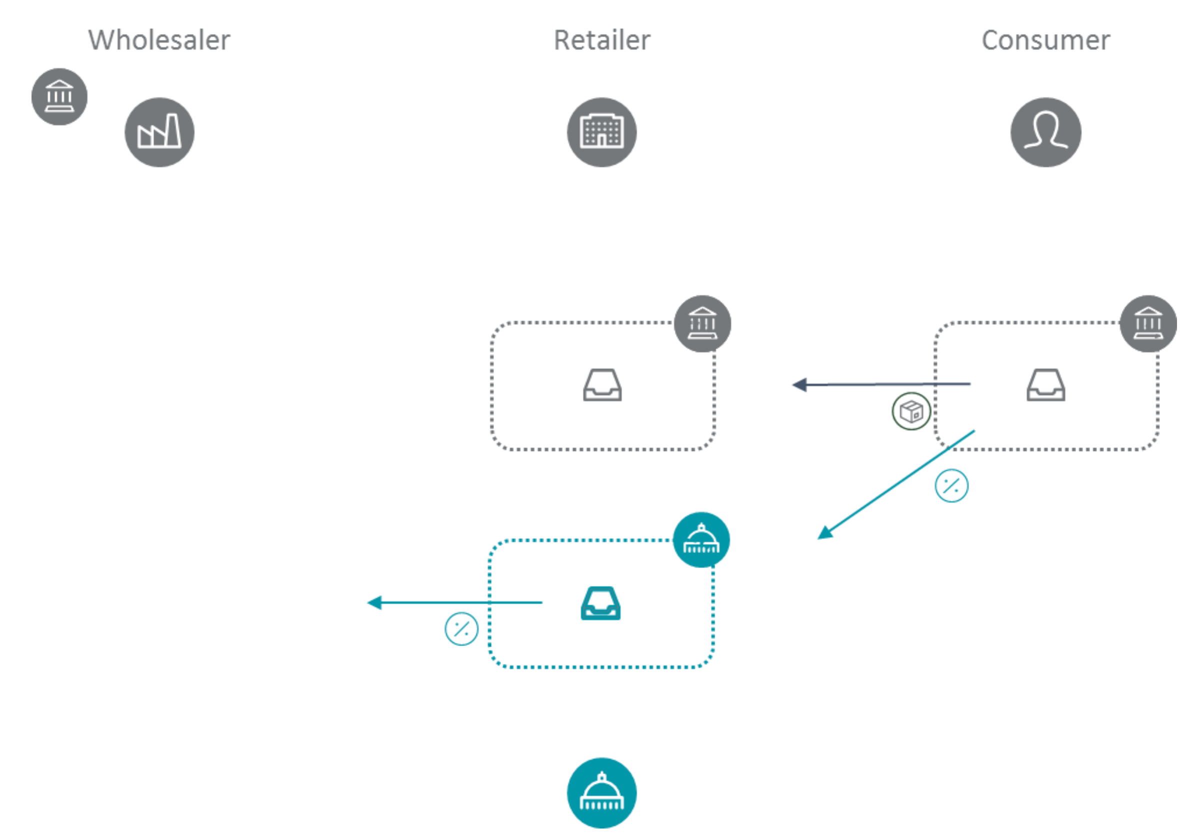
A.4.2 Model with blocked VAT bank account

Blocked VAT bank accounts, as mentioned, were designed as a concept to limit the cash flow impact for businesses. The accounts could be organised with the administration as well as with a bank or financial institution. The aim is to solely reserve the use of the account for VAT, i.e. to receive and pay VAT.

Model M: A blocked VAT bank account of the retailer

Figure 58: Model M – Split payment with blocked bank account of retailer

Overview



Taxable amount payment	Consumer initiates of taxable amount from its bank separately from the payment of the VAT amount.
VAT payment	Consumer initiates payment of VAT amount from its bank
Splitting agent	Consumer
Settlement of VAT	VAT has been paid directly to the tax authority A potential refund is requested in the VAT return

Source: Deloitte

All considerations we have noted in a B2B context are applicable in a B2C and B2G context.

In terms of the compliance burden, a blocked VAT bank account system would among others possibly end up in a complex system, because first there would be a lot of bank accounts (one per retailer and per Member State). Second, the correct account number is essential information during the payment process. The system is prone to (human) errors. Questions will rise on how payments towards the wrong account could be rectified and on how to verify the account details. A system to check the correctness of these account details will certainly be useful. E-invoicing could reduce the errors but the cost of setting up such e-invoice systems is high without harmonised standards.

On the financial aspects of blocked accounts, it is to be noted that managing of these accounts might be costly. Of course as with other models above the number of transactions would double, creating extra compliance costs.

A.4.3 Payment type possibilities

All considerations noted in a B2B context are applicable also in a B2G and B2C context.

Annex B - Methodology for Assessment of the Policy Options

This section presents the methodology and assumptions used to assess the impacts of the policy options under consideration to introduce a split payment mechanism as an alternative VAT collection method. The section provides detailed explanations of the sources used, the approach adopted, the assumptions made and their basis.

B.1 Approach

The impact of each of the policy options is evaluated both quantitatively and qualitatively based on its impact on the government, businesses and wider society. This section focuses on the quantitative cost-benefit assessment, which covers the following areas:

1. **The impact on the VAT Gap.** This considers the potential for reducing existing fraud and non-compliance as well as the potential for new forms of fraud and non-compliance to emerge.
2. **The cash flow impacts.** Based on assumptions around the settlement period, the number of taxable persons and the tax revenue estimates, estimations for the impact on cash flow for businesses and Tax Authorities are assessed.
3. **The administrative burden.** The Standard Cost Model (SCM) is used to estimate the likely cost implications of different options for businesses and public bodies.
4. **The costs of implementation.** The experience of other countries and insights from stakeholders allows for an estimation of the one-off cost of designing and implementing the new system, as well the annual operational costs.
5. **Overall Cost-Benefit Analysis.** The CBA takes into account the costs and benefits of each of the policy options over the timeframe of the investment, which is discounted with a social discount rate in order to compare the NPV of each option.

The general approach to each of these areas is presented below.

B.1.1 Impact on the VAT Gap

Introducing a split payment mechanism is expected to reduce the current VAT Gap by limiting types of fraud and non-compliance. By splitting VAT payments to the tax authority, the supplier will no longer be able to withhold the tax charged to their customer before it is passed to the relevant tax authority.

The impact on the VAT Gap of each option is assessed based on:

- **The proportion of the VAT Gap that is attributed to different types of fraud.** For example, the proportion where the failure to pay is due to MTIC fraud or to bankruptcy.
- **The scope of the specific policy option.** For example, whether it applies to B2B transactions only or to other sales, and the range of payment types covered.
- **The effectiveness of split payment in addressing the specific type of fraud or other loss of revenue.** For example, split payment can address failure to pay due to bankruptcy through the fact that payments are taken at point of sale, but may not address fraud on cash transactions that are not recorded.

Based on this information, the proportion of the overall VAT Gap that can be addressed by the specific policy option is estimated.

This approach requires a disaggregation of the VAT Gap by types of non-compliance as well as an understanding of the relative prevalence of various types of supplies (B2B, B2C and B2G) and payment methods (EFT, credit card, cash).[171]

The principal source for this information is existing studies on the VAT Gap. However, these have their limitations.

- The analysis is limited to the impact of B2B. There are currently no estimates on the proportion of the VAT Gap that is due to B2C and B2G transactions.
- The granularity of the data is not sufficient. Due to a lack of data the study does not analyse the VAT Gap at the payment level. The 2010 study acknowledges its estimates on the size of the gap attributed to B2B may be significantly reduced if not all B2B payments are EFT.
- The breakdown estimates extrapolated to EU level were based solely on UK data. This does not necessarily represent other Member States in the EU.

Due to the data limitations above, in order to analyse the different policy options, a number of assumptions needed to be made. Therefore interviews with VAT tax experts were used to develop these assumptions (for example, regarding the proportion of EFT transactions undertaken by consumers and government) and assess the effectiveness of the different options in reducing the VAT Gap.

The approach taken draws on that used in previous studies in this area.

1. Tax experts were asked to answer the following:

   For each of the elements of fraud and non-compliance that make up the VAT Gap what would the impact of each option be on reducing the VAT Gap:
   - *No impact*
   - *Very low impact*
   - *Low impact*
   - *Medium impact*

[171] These disaggregations were requested as part of the survey to the 28 Tax Authorities.

- *Medium to high impact*
- *High impact*

The 2010 study estimates, of the impact of the introduction of a split payment mechanism on B2B transactions, were used as a basis for answering these questions. Tax experts were asked to consider the changes in scope of each option given the impact estimated during the 2010 study. Similarly, the experiences of other countries such as Italy and Bulgaria were used to inform these discussions; while the introduction of the split payment in Italy has seen a significant increase in revenues, in Bulgaria it has had little impact as other forms of fraud emerged. These contrasting experiences have been reviewed and discussed with experts in order to obtain a view on what is more likely to occur at the European level and how policy design affects the likely outcome.

2. The next step is to quantify the potential impacts of each option on reducing the different elements of the VAT Gap. A percentage range is applied to each of the above in order to quantitatively assess the impact of each of the options. Based on previous work in this area, such as the 2010 study, the table below provides the ranges that were assigned.

Table 48: Example impacts

Qualitative impact	No impact	Very low	Low	Medium	Medium to high	High
Quantitative impact	0%	0-10%	10-30%	30-50%	50-70%	70-90%

Source: Deloitte analysis

Note that this assumes that no policy will eliminate 100% of the VAT Gap, as for any collection mechanism there will be those who try to find methods to evade or commit various types of fraud.

3. The total impact of each policy option on the VAT Gap is then calculated by combining the estimated individual impacts on the different types of fraud and non-compliance.

In addition, it is important to consider the risk that new forms of non-compliance may emerge in response to the new system. Discussions with EU stakeholders have highlighted some areas where new fraud could occur:

- Excluding certain types of supplies from the scope of the split payment mechanism (i.e. B2B, B2C or B2G) may provide businesses with the incentive to report wrongly the nature of the transaction.
- Excluding some payment methods from the scope of the split payment mechanism could incentivise businesses to switch to other payment methods. For example, if split

payment is not applicable to cash transactions, businesses may increase the proportion of transactions that are conducted using cash.

- Shifting VAT payment liability from supplier to customer may shift fraud accordingly, if not mitigated.

To obtain a complete view of the impact, the VAT Gap analysis considers both the potential to reduce existing forms of non-compliance *and* the risk that new forms of non-compliance may emerge. The interviews with tax experts included the following additional questions:

- What is the potential for different types of businesses to switch payment methods to avoid the split payment mechanism?
- What is the possibility of new types of fraud and non-compliance to occur under the different policy options?

B.1.2 Impact on cash flow

Under the split payment model the VAT payment will be shifted to transactional basis, ensuring faster payment of output VAT to the tax authorities. However, the recovery of input VAT does not necessarily change with the introduction of a split payment system. As a result, businesses in a VAT credit position will not be able to use their output VAT ahead of receiving a refund and will therefore see a worsening of their cash flow position; however, the government benefits from receiving gross VAT payments more quickly, improving its cash flow.

The cash flow analysis employed is a top-down approach using aggregate net and gross VAT revenues. It supports the estimation of:

- An aggregate cash flow impact that feeds into to the CBA.
- The impact on the average business, by business size within each Member State.
- How individual businesses may be affected, based on illustrative net and gross VAT cash flows.

The impact on cash flow is calculated as follows.

1. A collective cash flow statement for all businesses is developed. This cash flow statement captures payments made and received in connection to VAT. It is assumed that under the current system, gross VAT corresponds to the VAT that businesses collect from their customers. The difference between net and gross VAT is assumed to be the input VAT that businesses pay to their suppliers. Finally, net VAT is assumed to correspond to the payments that businesses make to the tax authorities.
2. These VAT-related cash flows are recorded on a daily basis, ending with the daily closing balance of cash resulting from the businesses' role in VAT collection. VAT payments and refunds are made and received based on the frequency and obligations in each Member State.

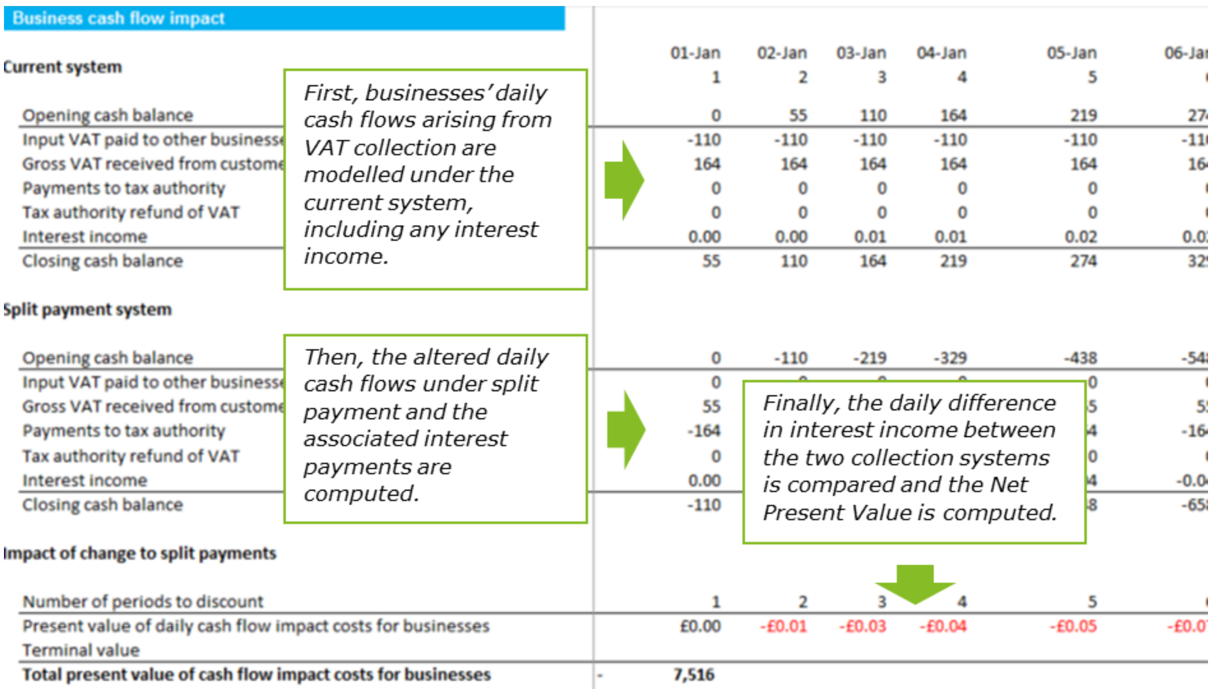
3. The impact of a switch to a split payment mechanism is calculated by changing the frequency and timing of payments made to and received from tax authorities. Specifically, output VAT is now paid to the tax authority on a daily basis.

4. In the case of a temporarily positive cash balance arising from VAT receipts and payments, businesses are assumed to earn interest on this balance. Conversely, in the case of a negative balance arising from VAT receipts and payments, businesses are assumed to borrow additional funds.

5. The cash flow cost to businesses of switching to a split payment system is then calculated as the interest paid under the split payment system, plus the interest received under the current system.

The modelling of the cash flow impact on businesses is illustrated in Figure 59 below.

Figure 59: Illustration of cash flow modelling



Note: figures are for illustrative purposes only
Source: Deloitte analysis

A similar approach is used to calculate the impact on tax authorities. In contrast to businesses, national tax authorities are likely to benefit from a positive cash flow impact. This is because the part of output VAT collected by businesses that are subject to split payment will be transferred sooner than it would have been under the current regime. Similarly to businesses, the tax authority is assumed to earn an interest rate on positive cash balances. However, assuming that VAT refunds do not exceed the amount of VAT that has previously been collected, the tax authorities' cash balances will be positive at all times. The cash flow benefit to tax authorities is calculated as the difference of interest earned under the split payment system, less the interest earned under the current system.

The introduction of a split payment mechanism is likely to aid in reducing the VAT Gap. This additional cash flow is modelled to accrue to tax authorities on a daily basis and leads to additional interest income. The additional VAT revenues resulting from a reduced VAT Gap, as well as the cash flow benefit from these, are included in the cash flow model.

B.1.3 Impact on the administrative burden

The introduction of a split payment mechanism impacts the administrative burden associated with VAT compliance currently faced by businesses and public bodies (i.e. in the case of B2G goods and services).

The impact is assessed using a **Standard Cost Model (SCM)** of businesses' compliance costs, with inputs sourced from interviews with a sample of businesses and public bodies as well as existing studies looking at the administrative burden of VAT obligations. The SCM methodology is applied to estimate the administrative burden of complying with legal requirements translated into Information Obligations (IOs).

The methodology adopted for applying the SCM is provided in Annex C.

B.1.4 Cost of implementation

Implementing the split payment mechanism will incur costs for the parties involved, both in terms of the initial investment cost (capex) and the recurring costs (opex) once the split payment mechanism is introduced.

The capex and opex costs resulting from implementing a split payment system depends on the design of each specific policy option. Under the set of options currently developed, the stakeholders likely to incur additional costs are the following:

- **Member States:** Tax authorities will be required to invest in certain technologies to manage the increased payments, to adapt to the different method of accounting and to monitor the new system. Public sector bodies will also face costs associated with accounting and procurement practices where split payment is applied to B2G supplies. To estimate these costs, we will use information from existing sources (e.g. the 2010 study or information about other similar systems) and data gathered in fieldwork interviews[172].
- **Taxable persons:** Businesses will face a number of additional costs for any of the current policy option designs. Not only will they sustain an initial investment cost in

[172] Data collected during fieldwork in Italy are expected to be particularly relevant in this respect.

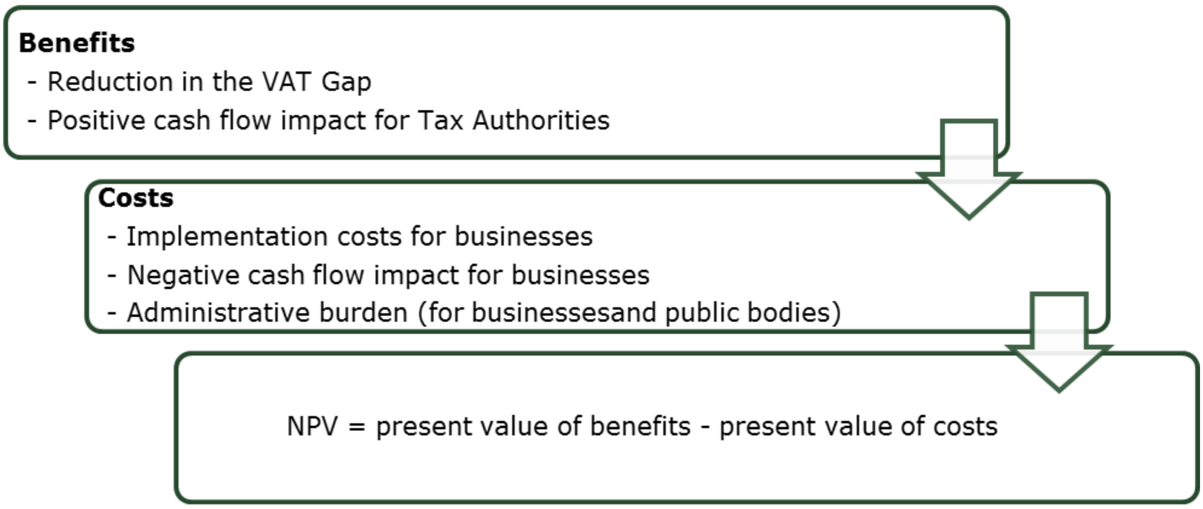
new accounting software, they will be faced with operating costs of this software (as well as face administrate costs to comply with the mechanism – included in the estimation of impact on the administrative burden above). To estimate the implementation costs, we will use information from existing sources (e.g. the 2010 study or information about other similar systems) and data gathered in fieldwork interviews.

These capex and opex costs are likely to contribute significantly to the overall cost of implementing a split payment system and therefore will be a key output of the CBA.

B.1.5 Overall Cost-Benefit Analysis

The overall cost-benefit analysis aims to make a quantitative assessment of the costs and benefits associated with the different policy options discussed previously over the defined timeframe of the investment. This is discounted at the long-term cost of capital in order to calculate and compare the NPV of each option.

Figure 60: Cost-Benefit Analysis Overview



Source: Deloitte analysis

The following approach is taken to calculate the NPV of each option:

- VAT Gap and cash flows are calculated for a representative year;
- These estimates are projected over the timeframe of the analysis and used to scale the annual NPV of the representative year;
- Administrative costs are assumed to accrue once a year;
- Costs of implementation are assumed to accrue for the first year;[173] and

[173] First consultations with IT experts imply that the changes could be implemented in 1 year. This will be explored further.

- All of the annual costs and benefits are discounted to yield the overall NPV.

In line with the European Commission's "Better Regulation" guidelines, the real social discount rate is assumed to be 4%.[174] As modelling is conducted in real terms, no adjustment for inflation is necessary to this rate.

The NPV of each option depends on the timeframe chosen. It has been agreed with the Commission, for all policy options, that the time frame considered for the cost-benefit analysis is 10 years, as of 2020. The detailed approach to the cost benefit analysis is explained in the following sections.

The following assumptions are described below:

- general assumptions required throughout the analysis;
- assumptions required to assess the impact of different policy options; this includes the assumptions made for the baseline case and how these vary under each of the options considered;
- assumptions relevant for the analysis of the definitive regime.

B.2 General assumptions

As the proposed policy options build on each other, some common assumptions are required throughout to estimate the impacts on stakeholders and the economy. These are outlined and explained in turn below.

B.2.1 Effective VAT rate

An estimate of the effective VAT rate in each market is required to estimate the gross VAT[175] payments affected under each of the policy options, and hence the impact on government revenues and cash flows.

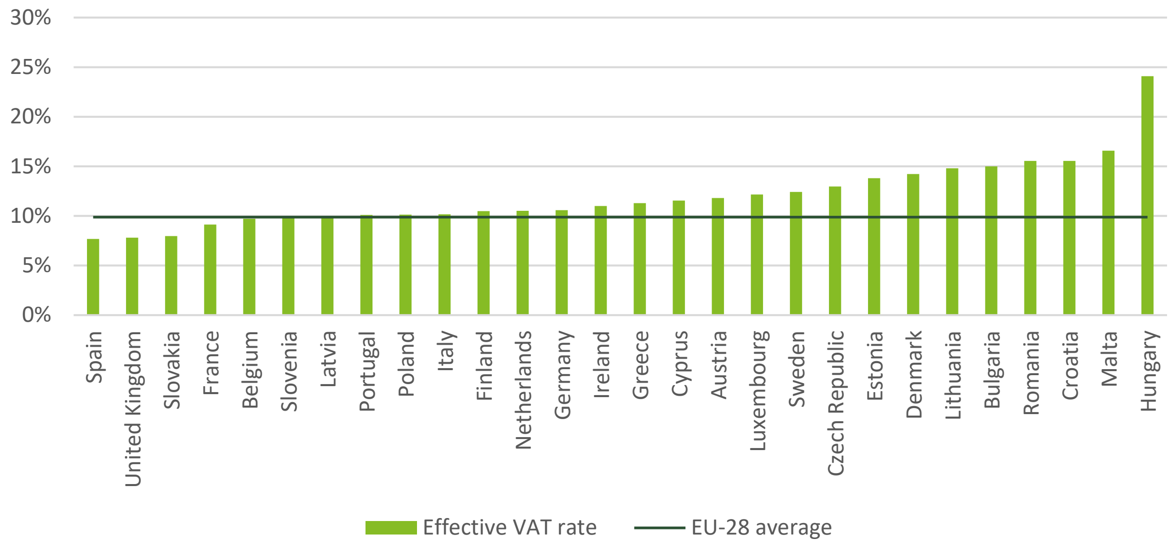
The effective VAT rate is calculated based on the ratio of total VTTL[176] revenue collected relative to 2015 final consumption. Estimates for each Member State are shown below.

[174] http://ec.europa.eu/smart-regulation/guidelines/tool_54_en.htm

[175] Gross VAT is the value of output VAT that is charged by businesses to all customers and would be declared via their VAT returns form

[176] The VTTL is an estimated amount of Net VAT that is theoretically collectable based on the VAT legislation and ancillary regulations

Figure 61: Effective VAT rate



Source: Deloitte analysis, based on Net revenue estimates and final consumption within the EU.

The effective VAT rate in the EU is calculated to be 10%. It therefore accounts for:

- The different rates applied across supplies and the weight that each supply contributes to the VAT revenues;
- The different rates applied across Member States and the weight that each country contributes to the overall EU VAT revenues.

B.2.2 Time taken to implement split payment mechanism

The time taken for the split payment mechanism to be fully operational in the EU will depend on the following:

- Number of years for the Commission to draft the new EU legislation to be agreed by the Council of EU
- Number of years for the Member States to implement the new EU legislation in their jurisdiction

Years taken for EU legislation agreement

The 2010 study assumes four years will elapse between the time the Commission publishes its first proposal for a directive and final adoption of the directive by the Council, based on experience with the legislative process for drafting tax directives.[177]

[177] PwC, 2010: 'Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries'

Years taken for implementation

The 2010 study assumes the implementation of the split payment model will take approximately three to five years. The 2010 study assumes this will be longer than the other models studied as it requires more technology and more stakeholders involved.[178]

However, for the purposes of this study, it has been agreed with the Commission that, for all options, all legislation and implementation will be agreed and complete by 2020. The costs and benefits are projected over a ten-year horizon, from this date. This approach is taken so that the different options are comparable and it is acknowledged that actual timeframes may differ.

B.3 Assumptions regarding the impact of split payment

The subsequent sections set out the methodology and assumptions for estimating the data points required for the CBA. The following data points are considered:

- Number of businesses impacted across the EU
- VAT revenues in the EU
- VAT Gap in the EU
- Costs of implementation
- Cash flow implications

For each of these points, this section describes the methodology and assumptions underlying the estimation of the baseline (i.e. the current regime) and the approach to estimating the change in these points under each of the policy options.

B.3.1 Number of businesses impacted

This data point requires first to estimate the number of businesses in the EU and then to estimate the number of businesses potentially impacted by the different policy options.

Estimating the number of businesses in the EU

Understanding the number of businesses that are likely to be impacted by split payment is necessary in order to estimate the overall impact on compliance costs and the cash flow impact for the average business affected. This section discusses the methodology and assumptions for estimating the total number of businesses in the EU, as well as the number of VAT registered businesses that will be directly impacted by split payment.

Data collected via surveys to Member States' tax authorities provides the basis for the estimation of the number of businesses in the EU. 22 Member States have provided data on this. For the remaining 6 Member States where data has not been provided, estimates developed as part of the Commission's study on the special scheme for small enterprises have been used.

[178] PwC, 2010: 'Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries'

The methodology used for these estimations is as follows:

1. Obtain Eurostat's estimates on the total number of businesses in the non-financial business economy and adjust to account for the excluded sectors.
   Eurostat provides, for all 28 Member States, the number of businesses in the non-financial business economy. However, the following sectors, which may be relevant for VAT purposes, are excluded from these estimates.[179]
    - A – Agriculture, forestry and fishing
    - K – Financial and insurance activities
    - O – Public administration and defence; compulsory social-security
    - P – Education
    - Q – Human health and social work activities
    - R – Arts, Entertainment and recreation
    - S – Other services activities
    - T – Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use
    - U – Activities of extraterritorial organisations and bodies

2. The Eurostat estimates were therefore adjusted to account for businesses operating in the excluded sectors. As part of the Commission's study on the special scheme for small enterprises Tax Authorities were asked for a breakdown of their businesses by sector of activity according to the NACE rev.2 classification.[180] For the Member States that were able to provide this breakdown, the proportion of these businesses operating in the excluded sectors above was calculated. The results show that on average, 36% of businesses operate outside of the non-financial business economy taken into account by Eurostat. An uplift of 36% was therefore applied to the Eurostat's data to obtain an estimate of all businesses operating in the Member States that did not provide this information.

B.3.2 Number of businesses registered for VAT purposes

Data collected via surveys to Member States' tax authorities is used to estimate the number of VAT registered businesses in each Member State and the EU as a whole. 22 Member states have provided data of the number of VAT registered businesses in their country.

This data has been used to estimate the VAT registered businesses in the remaining Member states, where no data was provided. The methodology used for this is below:

[179] http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Non-financial_business_economy

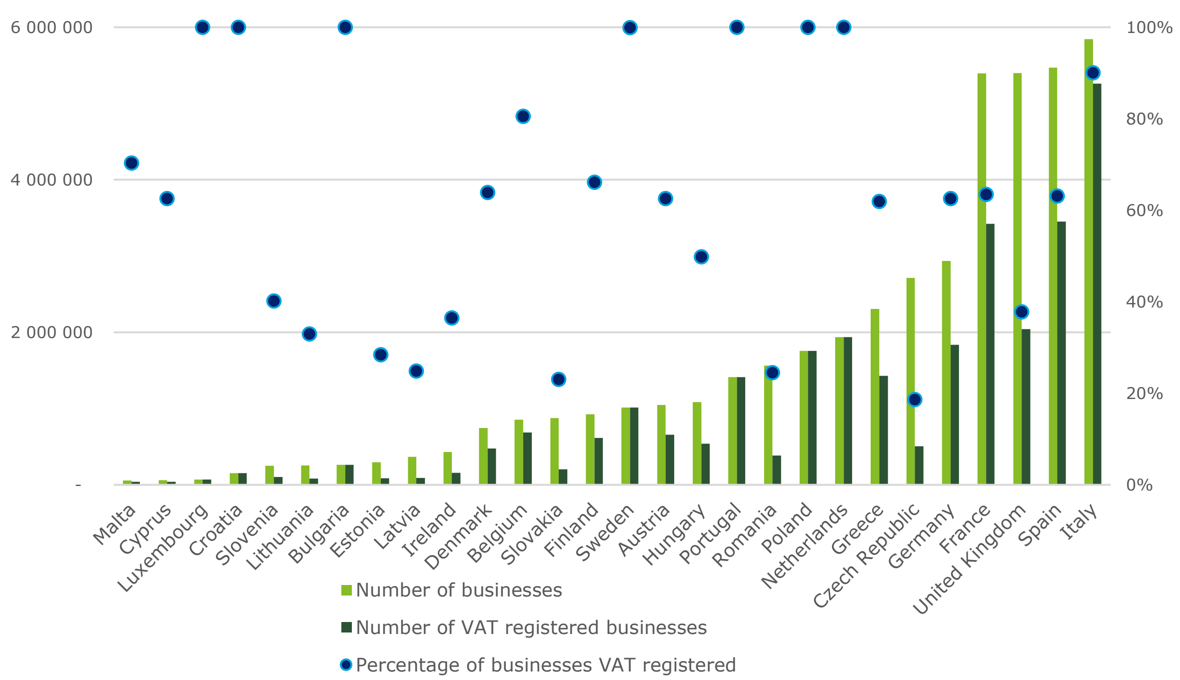
[180] This is the case for Bulgaria, Croatia, the Czech Republic, Finland, France, Hungary, Ireland, Italy, Slovakia and Slovenia. Lithuania also provided this information but was excluded from the calculations, as some of their businesses could not be identified. Since it is uncertain in which sectors these unidentified businesses operate, Lithuania is excluded to avoid any bias in the results. Denmark and Spain also provided some industry classification for their businesses, however not according to the NACE rev.2 classification. They could therefore not be included in the calculations.

- Calculate ratio of VAT registered businesses to total businesses in 22 Member states where data has been provided;
- Calculated average ratio across the 22 Member States;
- Apply average ratio (VAT registered businesses to total businesses) to the total business estimates in the remaining 6 Member States.

Given each Member State has different thresholds which in turn impacts the ratio of VAT registered businesses to total businesses, a simple average would help account for this.

The results show on average that 63% of businesses are registered for VAT. Therefore this was applied to the remaining six countries to estimate the VAT registered businesses in those countries. It is estimated that there are 28.7 million VAT registered businesses in the EU. The following graph provides estimates for both total and VAT registered businesses within the EU.

Figure 62: Number of businesses in the EU-28 countries



Source: Deloitte estimates based on survey data

Estimating the impact of split payment on the number of businesses

The introduction of a split payment mechanism will impact a considerable proportion of businesses. How the different types of businesses are impacted will vary depending on a number of variables including type of transaction, where the liability lies for the payment and whether the transaction is cross border.

The table below shows the total number of businesses impacted under each of the policy options as well as the underlying methodology.

Table 49: Total number of businesses under each policy option

Option	Methodology	Value
1	• When calculating the administrative burden it is assumed that all VAT registered businesses across the EU will be impacted, albeit to differing degrees, by the introduction of a split payment mechanism. • For the cash flow analysis it is only the total number of VAT registered businesses that do B2B sales within each Member State that will see a cash flow impact. Although data on this is not reported in official data sources, using data from a Flash Eurobarometer study on the internationalisation of SMEs[1] one can compare the number of businesses doing B2B transactions across different business sizes to develop an estimate. • The trends in the data show that the larger the business the more likely it is to participate in B2B trade. As such the assumption for the percentage of total businesses and in turn VAT registered businesses that do B2B transactions should be taken towards the upper bound of these figures, with the lower bound being the weighted average. • On this basis, it is assumed that the proportion of businesses that do B2B sales is between 87% and 94%	Total businesses impacted: 28 703 722 Businesses that do B2B sales: 24 972 238 – 26 981 498
2	Combining the application of split payment mechanism with the general reverse charge mechanism in certain Member States will result in businesses being impacted differently depending on the approach taken. For the purposes of the study only the number of businesses impacted by split payment are used for understanding the costs and benefits associated to each option e.g. when calculating the administrative burden and cash flow costs. Therefore at the EU level the number of businesses impacted by option 2 will be the same as option 1, except relevant businesses in Austria and Czech Republic are excluded.	Total businesses impacted: 27 541 313 Businesses that do B2B sales: 23 960 942 – 25 888 834
3	The introduction of a split payment mechanism across EFT for all transaction types will impact a large proportion of businesses. However there is currently no data on the proportion of businesses that do not use EFT as a payment	Total businesses impacted: 27 541 313

[1] Flash Eurobarometer 421, Internationalisation of Small and Medium-sized Enterprises (2015)

Option	Methodology	Value
	method. In order to estimate the cash flow impacts and administrative burden the study will use all VAT registered businesses as an estimate. However it is important to recognise that if a large proportion of businesses do not use EFT then this impact would be reduced. Under option 3, B2B EFT transactions within Austria and Czech Republic are subject to reverse charge. It has been assumed that a Member state will either choose to apply GRCM or split payment. Therefore as Austria and Czech Republic apply the GRCM no businesses in each country will be impacted by split payment.	
4	The introduction of a split payment mechanism across all payment and transaction types will impact all businesses. Similar to option 3, Austria and Czech Republic apply GRCM and therefore will not be impacted by any application of a split payment mechanism	Total businesses impacted: 27 541 313
5	• See option 1	Total businesses impacted: 28 703 722 Businesses that do B2B sales: 24 972 238 – 26 981 498
6	• The number of businesses impacted by the application of option 6 are the same as option 3 however businesses within Austria and Czech Republic are now included in the analysis.	28 703 722
7	• The number of businesses impacted by the application of option 6 are the same as option 4 however businesses within Austria and Czech Republic are now included in the analysis.	28 703 722

B.3.3 VAT Gap in the EU

This data point requires first to estimate the VAT Gap in the EU and then to estimate the impact of split payment on the VAT Gap for each of the different policy options.

Estimating the VAT Gap in the EU

A combination of data collected via surveys to Member States' tax authorities and the Commission's study on the VAT Gap (hereinafter the 2016 VAT Gap Study)[181] are used to estimate the VAT Gap in each Member State and the EU. Certain Member States have raised concerns over the over the 2016 VAT Gap Study methodology and its estimates and as such have provided their own. Given these concerns, data from tax authorities have taken precedence and are used. However where no data has been provided the 2016 VAT Gap Study estimates are used.

Neither tax authority data, nor the Commission's study provide an estimate for the VAT Gap in Cyprus. It is important for understanding the full impact of these different policy options and the potential VAT Gap reduction within the EU to have a full data set from the outset. Therefore the VAT Gap attributed to Cyprus has been estimated using the following approach:

- Calculate the average ratio of the VAT Gap relative to Net Revenues
- Apply the average ratio to Net revenue of Cyprus

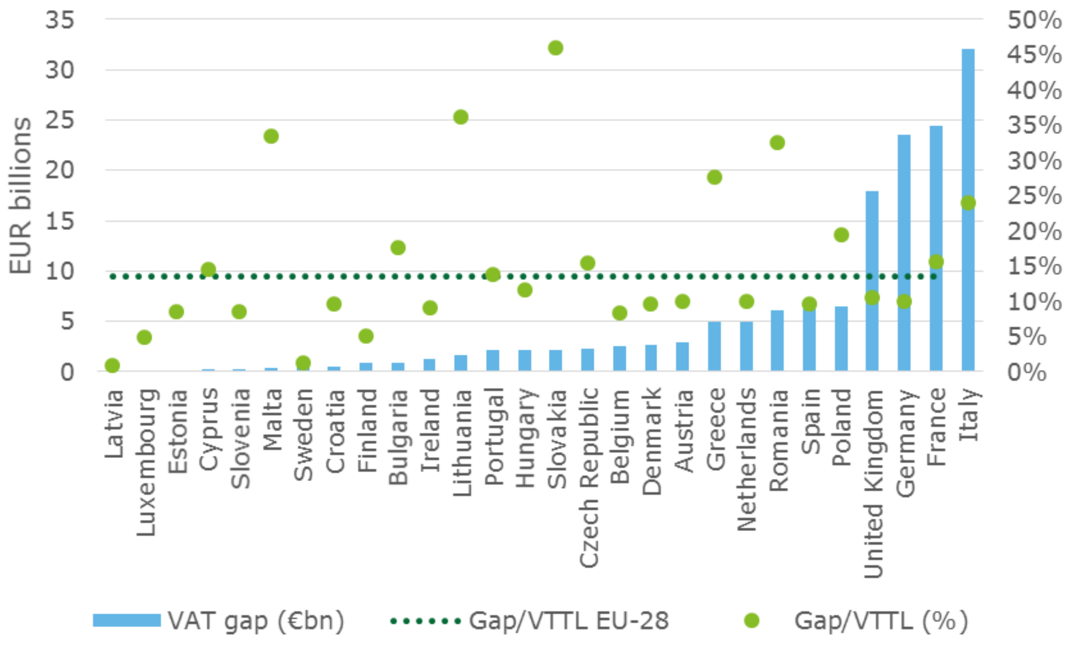
As the different measures taken by each Member State in reducing the VAT Gap or the inherent characteristics that result in different levels of the VAT Gap within each country cannot be quantitatively accounted for, a simple average has been calculated as to not weight it towards any one country

Combining methodologies it is calculated that the total VAT Gap across the EU is **EUR 150.2 billion** (2015)[182].

[181] Case, 2016: 'Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final Report'

[182] The VAT Gap is assumed to grow in future years keeping constant the VAT Gap as a share of net VAT revenues and in turn VAT revenues as a share of real GDP. Therefore this assumption will be used to create projections for the VAT Gap in future years.

Figure 63: VAT Gap within the EU



Source: Survey data and 2016 VAT Gap Study

VAT Gap breakdown by different types of fraud and non-compliance

Tax authorities were asked for a breakdown of the VAT Gap by different types of fraud and non-compliance, however only 4 Tax Authorities were able to provide a partial data set of this breakdown. Although, given the limited response it cannot be used as a basis for the study, the data received is in line with the 2010 study estimates stated below. For example:

- In Finland, 21% of the VAT Gap is attributed to insolvencies
- In Estonia, 31% of the VAT Gap is attributed to fraud/evasion
- In Italy, 26% of the VAT Gap is attributed to a combination of tax avoidance, bankruptcies, insolvencies and errors.

The 2010 study cited above provides a breakdown of the VAT Gap by types of fraud and non-compliance at the EU level.

Table 50: Components of the VAT Gap

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	17-26%	4-5%	24-38%	24-28%	3-32%

Source: PwC, 2010: 'Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries'

This breakdown is based solely on UK data and has limitations, in particular with the estimations of MTIC fraud. Both the 2015 study on *Implementing the 'destination principle' to intra-EU B2B Supplies of Goods* (hereinafter "the 'destination principle' study")[183] and the 2010 study estimate the proportion of the VAT Gap attributed to MTIC. While the 'destination principle' study estimated MTIC fraud cost revenue authorities between EUR 43.5 billion and EUR 53 billion annually[184], the 2010 study has estimated this impact to be lower.

Discussions with subject matter experts have raised concerns with the accuracy of this estimate and stated the UK may not represent the rest of the EU. Based on these discussions the 'destination principle' study estimates seems more appropriate and hence a combination of the two data sources will be used as a basis for the analysis. The below estimates will be used as a baseline for the options analysis:

Table 51: VAT Gap split by different types of fraud and non-compliance

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Proportion of the VAT Gap	23-27%	3-5%	22-37%	22-28%	3-30%

Source: Deloitte analysis based on 2010 and destination principle study

It is assumed, all other things being equal, that the VAT Gap as a share of net VAT revenues is constant. Further, it is assumed that VAT revenues as a share of real GDP remains constant. From this follows that the VAT Gap is assumed to grow at the same rate as real GDP. Projections of real GDP growth from the IMF's World Economic Outlook will be used to create projections for the VAT Gap in future years.

Estimating the impact of split payment on the VAT Gap

The introduction of a split payment mechanism will have an impact on the VAT Gap. The subsequent sections provide additional details on the methodology and calculations for estimating this impact across the different policy options.

Option 1

The methodology that was described above to estimate the total VAT Gap within the EU has been used to estimate the potential impact of the different policy options on the VAT Gap. When estimating the impact of the introduction of option 1 on the VAT Gap across the EU two further assumptions are to be considered:

- Percentage of the VAT Gap that is B2B

[183] EY study commissioned by the European Commission, Implementing the 'destination principle' to intra-EU B2B Supplies of Goods, TAXUD/2013/DE/319, 30 June 2015, pp. 13-14
[184] MTIC fraud estimates based on 2011 VAT Gap estimates of EUR 193 billion.

- Percentage of B2B transactions that are EFT

Percentage of the VAT Gap that is B2B

As tax authorities were unable to provide this level of granularity, the percentage of the VAT Gap that is B2B is considered using estimates from previous studies (i.e. the 2010 study and the 2015 'destination principle' study). Understanding the different elements of the VAT Gap (types of fraud and non-compliance) the potential impact of this option can be estimated.

The 2010 study estimates that a split payment mechanism across all B2B transactions could reduce the VAT Gap by EUR 53.7 billion – EUR 81.8 billion.[185] Given the study estimates the VAT Gap was EUR 118.8 billion in 2009, the reduction accounted for by a split payment mechanism on B2B transactions is between 50.3% - 76.6%.

The 2010 study further breaks down this analysis by estimating the impact a split payment mechanism on B2B transactions would have on different types of fraud and non-compliance. The table below provides these estimates:

Table 52: 2010 study estimates for impact of a B2B split payment mechanism of different types of fraud and non-compliance

	Missing trader intra-community fraud	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	50-70%	0-30%	30-70%	30-70%	70-90%

Source: The 2010 study

Therefore, using the above estimates and this studies estimates for the distribution of the VAT Gap by different types of fraud and non-compliance the potential impact is as follows:

[185] PwC, 2010: 'Study on the feasibility of alternative methods for improving and simplifying the collection of VAT through the means of modern technologies and/or financial intermediaries'

Table 53: Potential impact of a B2B split payment mechanism on the VAT Gap, based on 2010 study

	Missing trader intra-community fraud	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	23-28%	4-5%	22-37%	22-28%	3-30%
VAT Gap (EUR min)	35.0 billion	5.2 billion	32.6 billion	32.6 billion	44.7 billion
VAT Gap (EUR max)	41.2 billion	6.9 billion	55.5 billion	41.6 billion	4.9 billion
Potential B2B reduction	50-70%	0-30%	30-70%	30-70%	70-90%
Additional VAT collected	17.5-28.8 billion	0-2.1 billion	9.8-38.9 billion	9.8-29.1 billion	4.4-31.3 billion

Source: Deloitte analysis based on 2010 and destination principle study

Using the 2010 study estimates, the overall impact of a B2B split payment mechanism on all transactions is between EUR 68.4 and EUR 103.3 billion.

The estimates for the impact of the introduction of a B2B split payment mechanism on reducing the VAT Gap have been considered when estimating the studies own estimates for the impact of the introduction of option 1

Percentage of B2B transactions that are EFT

The 2010 study acknowledged that it was unknown at the time how many B2B payments were settled using EFT versus cash or credit and debit cards. If it can be shown that a large proportion of transactions are made using card or cash its estimated impact would be significantly reduced. Similarly if it is possible for a business to easily switch to an alternative payment method the impact on the VAT Gap from moving to a split payment mechanism would be lessened.

Based on fieldwork across 7 Member States, businesses that conduct B2B sales have stated that EFT accounts for between 90-100% of all transactions. This assumption is also considered when estimating the impact of the application of a split payment mechanism under policy option 1.

While the 2010 study is used as a basis for the impact of a split payment mechanism on B2B transactions, further discussions with experts and stakeholders during the fieldwork have been used to refine the above impact estimates, given the inherent uncertainty. As such the below estimates have been calculated.

Table 54: Impact of introduction of option 1 on the VAT Gap

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	23-27%	3-5%	22-37%	22-28%	3-30%
VAT Gap (EUR min)	35.0 billion	5.2 billion	32.6 billion	32.6 billion	44.7 billion
VAT Gap (EUR max)	41.2 billion	6.9 billion	55.5 billion	41.6 billion	4.9 billion
Potential reduction	50 -70%	0%	30 - 50%	0 - 10%	30 - 50%
Additional VAT collected	17.5 - 28.9 billion	0 billion	9.8 - 27.8 billion	0- 4.2 billion	2.4 – 13.4 billion

Source: Deloitte analysis[186]

The introduction of a split payment mechanism on EFT B2B transactions under policy option 1 is estimated to reduce the VAT Gap by between **EUR 40.7 billion (27.1%) and EUR 63.2 billion (42.1%) per year.**[187]

Option 2

Option 2 builds on Option 1 and contains therefore a split payment on EFT in B2B transactions. However, it combines the introduction of split payment with an application of GRCM in Austria and Czech Republic. As the GRCM is out of scope for the analysis of this study, for these Member States that apply a GRCM, no VAT Gap impact is estimated. As the VAT Gap within both Austria and Czech Republic is not considered when calculating the impact of option 2 on the different types of fraud and non-compliance, the baseline numbers need to be adjusted.

The following table provides the estimates for the impact of an introduction of a split payment mechanism across all payment and transaction types, using these adjusted baseline numbers.

[186] These estimates are based on expert assessment. The qualitative explanation for the various impacts by different types of fraud and non-compliance for each policy option can be found in section 5.
[187] These estimates are based off of 2015 and as such the estimated impact is for 2015 also. For the overall cost-benefit analysis impact and NPV any estimates are brought forward to the correct year, i.e. 2020-2029.

Table 55: Impact of introduction of option 2 on the VAT Gap

	Missing trader intra-community fraud	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	23-27%	3-5%	22-37%	22-28%	3-30%
VAT Gap (EUR min)	33.8 billion	5.0 billion	31.5 billion	31.5 billion	43.2 billion
VAT Gap (EUR max)	39.8 billion	6.7 billion	53.6 billion	40.2 billion	4.7 billion
Potential reduction	50 -70%	0%	30 - 50%	0 - 10%	30 - 50%
Additional VAT collected	16.9 – 27.9 billion	0 billion	9.5 – 26.8 billion	0- 4.0 billion	2.3 – 21.6 billion

Source: Deloitte analysis

The introduction of a split payment mechanism on EFT B2B transactions under policy option 2 is estimated to reduce the VAT Gap by between **EUR 39.3 billion (27.1%) and EUR 61.1 billion (42.1%) per year.**

Option 3

Building on from option 2, the scope of Option 3 is further increased and applies split payment to EFT on all transaction types. As with option 2, Austria and Czech Republic apply a GRCM, no VAT Gap impact is estimated. To account for the impact on the VAT Gap, additional assumptions need to be considered:

- Percentage of the VAT Gap that is B2C
- Percentage of the VAT Gap that is B2G
- Percentage of B2C VAT Gap that is due to EFT payments
- Percentage of B2G VAT Gap that is due to EFT payments

However, as discussed previously, there is currently limited data on the VAT Gap and this level of granularity is not available.

Percentage of B2C and B2G transactions that are EFT

Although no data currently exists on the percentage of transactions that are EFT across different customer types, the following were used to inform discussions with Tax Experts:

- It is assumed that given the type of transaction the percentage of transactions that are EFT will be same for government and business customers (B2G and B2B). Hence it is assumed that the percentage of B2G sales that are EFT is 90%

- The assumption of the percentage of B2C transactions that are EFT is based on data on consumption spending and collected through interviews. Based on data from the ONS[188], classifying what spending categories are likely to be EFT (e.g. Utility bills, TV. Internet) allows an estimation of B2C EFT to be 9%. This assumption was further tested during the fieldwork.

Given the limited data on the VAT Gap, tax experts have been asked to consider their own views on the above assumptions and as well as the estimates already provided under option 1 and option 2 while estimating the impact of increasing the scope of a split payment mechanism under policy option 3 on the VAT gap.

Using these estimates the resulting impacts of policy option 3 have been calculated.

Table 56: Impact of introduction of option 3 on the VAT Gap

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	23-27%	3-5%	22-37%	22-28%	3-30%
VAT Gap (EUR min)	33.8 billion	5.0 billion	31.5 billion	31.5 billion	43.2 billion
VAT Gap (EUR max)	39.8 billion	6.7 billion	53.6 billion	40.2 billion	4.7 billion
Potential B2B reduction	70 -90%	0%	30 - 50%	0 - 10%	50 - 70%
Additional VAT collected	23.7 – 35.9 billion	0 billion	9.5 – 26.8 billion	0- 4.0 billion	3.3 – 21.6 billion

Source: Deloitte analysis

The introduction of a split payment mechanism on EFT B2B transactions under policy option 3 is estimated to reduce the VAT Gap by between **EUR 54.7 billion (37.7%) and EUR 70.0 billion (48.2%) per year.**

Option 4

The methodology discussed in option 3 is used to assess option 4. The following table provides the estimates for the impact of an introduction of a split payment mechanism across all payment and transaction types.

Table 57: Impact of introduction of option 4 on the VAT Gap

[188] UK Office of National Statistics.

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	23-27%	3-5%	22-37%	22-28%	3-30%
VAT Gap (EUR min)	33.8 billion	5.0 billion	31.5 billion	31.5 billion	43.2 billion
VAT Gap (EUR max)	39.8 billion	6.7 billion	53.6 billion	40.2 billion	4.7 billion
Potential B2B reduction	70 -90%	0%	50 - 70%	0 - 10%	50 - 70%
Additional VAT collected	23.7 – 35.9 billion	0 billion	15.8 – 37.5 billion	0- 4.0 billion	3.3 – 21.6 billion

Source: Deloitte analysis

The introduction of a split payment mechanism on EFT B2B transactions under policy option 4 is estimated to reduce the VAT Gap by between **EUR 61.0 billion (42.1%) and EUR 80.7 billion (55.6%) per year.**

Options 5, 6 and 7

Note on the definitive regime: In order to estimate the impact of split payment on the reduction of the VAT Gap the new baseline VAT Gap needs to be estimated. In order to do so it is essential to identify the element of the VAT Gap that is MTIC Fraud and what impact moving to a definitive regime would have. The assumptions for this are detailed in the previous section.

<u>VAT Gap under the definitive regime</u>

Table 58: VAT Gap (alternative baseline), based on the introduction of a definitive regime

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	3-8%	4-6%	28-47%	28-35%	4-38%
VAT Gap (EUR min)	3.4 billion	5.2 billion	32.6 billion	32.6 billion	44.7 billion

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
VAT Gap (EUR max)	9.6 billion	6.9 billion	55.5 billion	41.6 billion	4.9 billion

Source: Deloitte analysis

The definitive VAT regime does not change the VAT treatment of domestic transactions, but will change the VAT rules on intra-EU cross-border B2B supplies by application of the destination principle[189]. As currently suggested, the definitive regime would change also VAT collection rules by obliging the supplier to charge VAT on B2B supply of goods to non-certified taxable person (using one-stop-shop (OSS) for declaration and payment), whilst applying reverse charge on B2B supplies to certified taxable persons (as currently applied on intra-EU services).

Therefore, as rules on domestic supplies would not be changed, the main difference between policy options 1-4 and 5-7 is the potential application of split payment to intra-EU B2B supplies to non-certified taxable persons, adjusting the baseline as stated above.

The findings from interviews with selected subject matter experts during the fieldwork have been used to quantitatively analysis, the impact of option all the options developed on a reduction of the VAT Gap.

Option 5

The methodology and assumptions discussed in option 1 is used to assess option 5. The following table provides the estimates for the impact of an introduction of a split payment under policy option 5.

Table 59: Impact of introduction of option 5 on the VAT Gap

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	3-8%	4-6%	28-47%	28-35%	4-38%
VAT Gap (EUR min)	3.4 billion	5.2 billion	32.6 billion	32.6 billion	44.7 billion

[189] Place of supply of intra-EU supplies of goods would become the Member State where the transport of goods ends and supplier becomes liable for VAT, instead of VAT liability of the customer on intra-EU acquisition.

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
VAT Gap (EUR max)	9.6 billion	6.9 billion	55.5 billion	41.6 billion	4.9 billion
Potential B2B reduction	30 -50%	0%	30-50%	0 - 10%	10-30%
Additional VAT collected	1.0 – 4.8 billion	0 billion	9.8 – 27.8 billion	0- 4.2 billion	1.5 – 4.5 billion

Source: Deloitte analysis

The introduction of a split payment mechanism on EFT B2B transactions under policy option 5 is estimated to reduce the VAT Gap by between **EUR 15.3 billion (12.9%) and EUR 38.2 billion (32.2%) per year.**

Option 6

The methodology and assumptions discussed in option 2 is used to assess option 6. The following table provides the estimates for the impact of the application of a split payment under policy option 6.

Table 60: Impact of introduction of option 6 on the VAT Gap

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	3-8%	4-6%	28-47%	28-35%	4-38%
VAT Gap (EUR min)	3.4 billion	5.2 billion	32.6 billion	32.6 billion	44.7 billion
VAT Gap (EUR max)	9.6 billion	6.9 billion	55.5 billion	41.6 billion	4.9 billion
Potential B2B reduction	50 -70%	0%	30-50%	0 - 10%	30-50%
Additional VAT collected	1.7 – 6.7 billion	0 billion	9.8 – 27.8 billion	0- 4.2 billion	2.4 – 13.4 billion

Source: Deloitte analysis

The introduction of a split payment mechanism on EFT B2B transactions under policy option 6 is estimated to reduce the VAT Gap by between **EUR 24.9 billion (21.0%) and EUR 41.1 billion (34.6%) per year.**

Option 7

The methodology and assumptions discussed in option 4 is used to assess option 7. The following table provides the estimates for the impact of an introduction of a split payment under policy option 7.

Table 61: Impact of introduction of option 7 on the VAT Gap

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	3-8%	4-6%	28-47%	28-35%	4-38%
VAT Gap (EUR min)	3.4 billion	5.2 billion	32.6 billion	32.6 billion	44.7 billion
VAT Gap (EUR max)	9.6 billion	6.9 billion	55.5 billion	41.6 billion	4.9 billion
Potential B2B reduction	50 -70%	0%	50-70%	0 - 10%	10-30%
Additional VAT collected	1.7 – 6.7 billion	0 billion	16.3 – 38.9 billion	0- 4.2 billion	2.4 – 13.4 billion

Source: Deloitte analysis

The introduction of a split payment mechanism on EFT B2B transactions under policy option 7 is estimated to reduce the VAT Gap by between **EUR 31.4 billion (26.5%) and EUR 52.2 billion (44.0%) per year.**

B.3.4 VAT revenues in the EU

This data point requires first to estimate the VAT revenues in the EU and then to estimate the impact of split payment on such revenues under the different policy options.

Gross VAT revenues

Information on gross VAT revenues from different types of transactions is required to estimate the additional VAT revenues that will be paid through the split payment mechanism. Data on gross VAT revenues has been collected from surveys issued to tax authorities in each Member State. The information collected has been reviewed against information provided as part of the Commission's study on the special scheme for small enterprises.[190]

Whilst the Net VAT revenues are comparable, a number of discrepancies between the data sources have been identified for gross VAT revenues. Some of the inconsistencies are highly

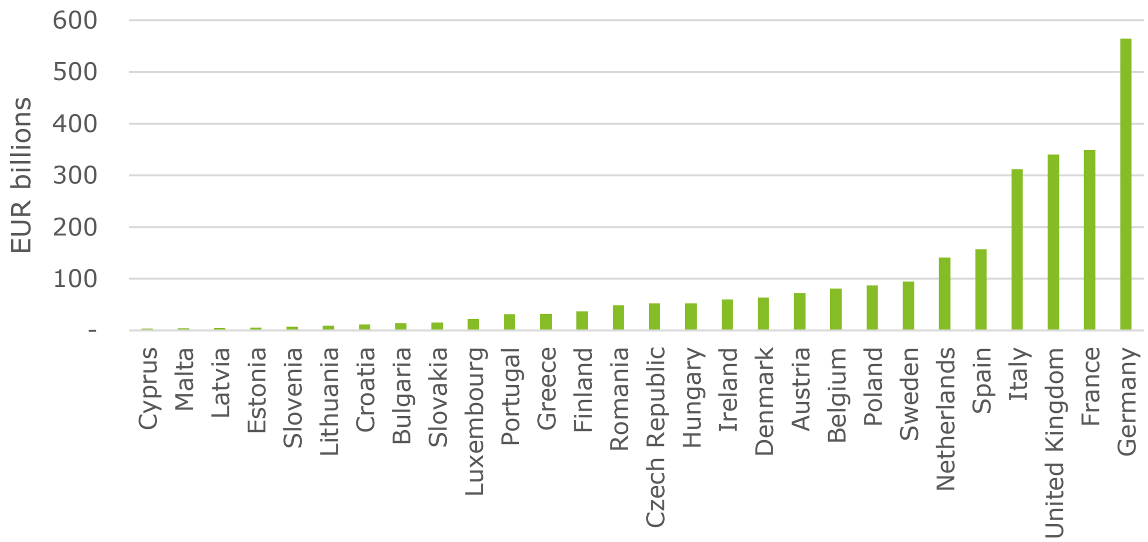
[190] Deloitte were commissioned by the European Commission to carry out a study assessing the Special Scheme for small enterprises during 2016.

significant and therefore this data cannot be relied upon. The tax authorities have been contacted to clarify the differences; however, as all data received has not been clarified, it has not been used for estimates in this study.

Given the issue stated above Gross VAT revenues within each Member State are therefore estimated by applying the effective VAT rate in each Member State to (Total Output – [Exports outside the EU – Imports into the EU])[191] in each Member State. The use of the effective VAT rate accounts for the different rates applied across supplies and the weight that each supply contributes to the VAT revenues for each Member State. This figure therefore captures total VAT owed across all transactions in the economy.

Gross VAT revenue estimates are shown below.

Figure 64: Estimated Gross VAT revenues within each Member State



Source: Deloitte estimates, based on common VAT rates and total output

Although an additional six Member States have verified their data, for consistency purposes this systematic approach has been used for all Member States in finding Gross VAT Revenues. The estimates above have however been cross-referenced against the data received during the survey data. Sensitivity analysis has also been conducted to understand the potential impact on the cash flow analysis, and overall cash flow implications to both Businesses and

[191] Based on Eurostat documentation on the European System of Accounts (ESA 2010), the following are "in principle" included in the national production account (and therefore output and GDP):
- illegal activities where parties are willing partners in an economic transaction;
- hidden and underground activities where the transactions themselves are not against the law, but are unreported to avoid official scrutiny;
- activities described as 'informal', typically where no records are kept.
In contrast, "illegal activities where either of the parties are not willing participants (e.g. theft) are not economic transactions" and are therefore not included

Tax Authorities. Annex E provides the results of the cross-reference and the sensitivity analysis.

Net VAT revenues

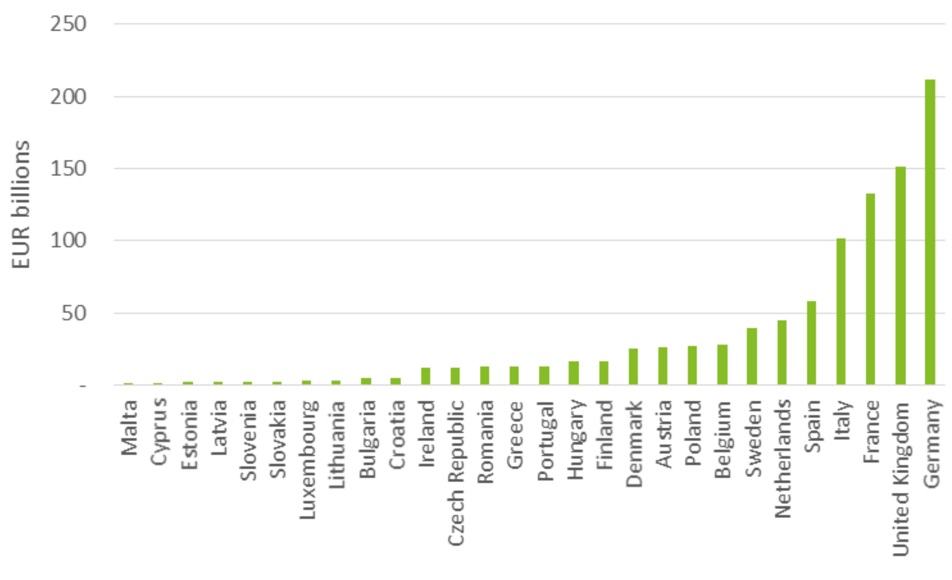
Information on net VAT revenues is required to estimate:

1) The overall impact on VAT revenues of each option.
2) The payments from gross VAT that will be refunded to businesses, and hence the implications for business and government cash flows.

Data collected via surveys to Member States' tax authorities provides the basis for the estimation of Net VAT revenues. 22 Member States have provided data on Net Revenues. Where data has not been provided, Eurostat data has been used.

Data obtained via surveys to tax authorities have been collated and checked for quality and consistency with other data sources. In particular, the net tax revenue data provided by the Tax Authorities for this study has been reviewed against information provided as part of the Commission's study on the special scheme for small enterprises and Eurostat.[192] Based on this review the data is found to be consistent and therefore is used in our study.

Figure 65: Estimated Net VAT revenues within each Member State



Source: Survey data

Estimating the impact of split payment on VAT Revenues

The introduction of a split payment mechanism will have an impact on the gross VAT revenues collected from businesses, the timing and value of refunds, and eventual net revenues

[192] Deloitte were commissioned by the European Commission to carry out a study assessing the Special Scheme for small enterprises during 2016.

(through the impact on fraud). The subsequent sections provide details on the methodology for estimating net VAT revenues under each of the options.

Net VAT revenue

As explained previously a reduction in the VAT Gap will increase the net VAT revenues collected. The estimates for the reduction in the VAT Gap will be added to the current estimates for Net VAT revenues to understand the new Net Revenue figures that will be collected under this policy option.

The table below provides an overview of the methodology used to obtain the value for net VAT revenues that will be covered under each of the policy options.

Table 62: Net VAT revenues under each policy option

Option	Methodology	Value
1	• The estimates for the reduction in the VAT Gap will be added to the current estimates for Net VAT revenues to understand the new Net Revenue figures that will be collected under this policy option.	EUR 1 007 – EUR 1 030 billion
2	• Although the mechanism of combating the VAT Gap varies by Member State the impact at the EU level of this option will be the same as option 1. • Hence the impact of Net VAT revenues collected will be the same as option 1.	EUR 1 006 – EUR 1 028 billion
3	• A reduction in the VAT Gap increases Net VAT revenues collected. The estimates for the reduction in the VAT Gap will be added to the current estimates for Net VAT revenues to understand the new Net Revenue figures that will be collected under this policy option. • Whilst it is important to recognise that some B2C, B2B and B2G transactions may switch to using alternative payment methods such as cash or credit and debit cards, there is no data available to estimate this and hence the impact of this switch on VAT revenues collected will be qualitatively discussed.	EUR 1 021 – EUR 1 036 billion
4	• A reduction in the VAT Gap will in turn increase Net VAT revenues collected. The estimates for the reduction in the VAT Gap will be added to the current estimates for Net VAT revenues to understand the new Net Revenue figures that will be collected under this policy option. • It is important however to recognise that a full scope split payment mechanism has never been analysed previously and as such no comparable data exists on the impact it may have. Tax experts	EUR 1 027 – EUR 1 047 billion

Option	Methodology	Value
	will be used to inform this impact including the possibility of new forms of fraud and non-compliance but where no quantitative estimates can be made a qualitative assessment will be made.	
5	• See option 1	EUR 1 013– EUR 1 036 billion
6	• See option 3	EUR 1 023 – EUR 1 039 billion
7	• See option 4	EUR 1 030 – EUR 1 050 billion

Source: Deloitte analysis

B.3.5 Cash flow implications

This data point requires estimating the impact that the policy options would have on business and public bodies' cash flow. First the general assumptions on cash flow are explained, followed by the method to be applied to assess the cash flow impacts per each option.

Estimating the cash flow of businesses and Tax Authorities

The following assumptions are made throughout the analysis of the impact on cash flows.

- **Flow of Sales:** Under the current VAT collection system, businesses' sales are assumed to be spread evenly throughout the year, such that businesses receive daily gross VAT equal to the annual amount divided by 365. Similarly, as sales are assumed to be uniform throughout the year, businesses pay daily input VAT that is equal to the annual amount divided by 365. As a result, businesses accumulate cash until they fill out their periodical VAT return.
- **Business cost of borrowing:** The interest rate at which businesses can borrow is informed by the ECB's MFI interest rates for loans to non-financial corporations[193], data from other central banks and survey responses. It should be noted that such interest rates are nominal rates and as such are adjusted to reflect the effect of inflation. When available, composite indicators are used to reflect the different maturities and amounts of companies' debt financing. Real interest rates are computed by dividing the January 2016 value of these rates by realised inflation over the same year.
- **Government cost of borrowing:** The interest rate that is applied to tax authorities' cash holdings are sourced from the ECB's interest rate statistics for EU member states[194]. These sovereign bond yields reflect the cost at which Member States can borrow funds. Cash balances arising from VAT collection allow a government to borrow less, resulting in lower public financing expenditure. Analogously to the business rate, this interest rate is transformed to a real rate by adjusting for inflation.

193 https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/bank_interest_rates/mfi_interest_rates/html/index.en.html

194 https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/long_term_interest_rates/html/index.en.html

- **Future interest rate changes:** Real interest rates for both governments and businesses are likely to change over the course of the assessment horizon. To account for this, financial market participants' expectations of future real interest rates are estimated from the yields on inflation-linked government bonds with varying maturities. Such bonds are issued by several EU Member States, including France and Germany.

Estimating the impact of split payment on cash flows

A switch to a split payment system eliminates the daily output VAT cash inflow to businesses resulting from transactions subject to split payment. At the same time, businesses continue to pay input VAT on these kinds of transactions, which is not recovered until a refund by the tax authority is processed. All other transactions remain unaffected and businesses continue to file VAT returns for these. Estimates of the gross revenues impacted under each of the options are therefore used to understand the additional VAT payments made by businesses, which are entered into the cash flow model described above.

In contrast to businesses, the tax authority benefits from earlier tax receipts from transactions subject to split payment. The input VAT that is deductible by businesses is to be refunded at a later stage and the tax authority can earn interest in the meantime. All other transactions remain unaffected, and the tax authority receives tax payments as a result of the periodically filed VAT returns.

Using a combination of assumptions (e.g. the proportion of B2B/B2G/B2G transactions that are EFT) and the estimates for gross VAT revenue split by final consumption and intermediate consumption, the study is able to understand what proportion of Gross VAT revenues are subject to split payment under each option. These estimates are therefore used to estimate the cash flow implications for both businesses and tax authorities.

B.3.6 Costs of implementation

The main costs identified for businesses and public bodies in implementing the split payment mechanism are:

1. Adaptation to ERP/accounting systems
2. Training

In addition, there are costs associated with the increase in financial transactions due to split payment. Further, tax authorities may incur costs for adjustments to their internal processes and systems.

As a general remark, the design of the policy options in this study does not rest on a specific IT architecture. Therefore the implementation costs estimated are notably lower than those assessed by the 2010 study[195], which included a clearing house and full automation.

The estimations used are based on data collected via interviews to businesses and tax authorities, and via desk research.

[195] PriceWatherhouseCooper (2010), Ibid.

B.4 Additional assumptions regarding the VAT definitive regime

The second group of policy options is based on the definitive VAT regime, as described in section 0. This alternative baseline is modelled to allow the study to assess options 5, 6 and 7.

Specific assumptions are required for the following data points:

- Share of VAT Gap impacted by the introduction of the definitive regime;
- Share of businesses impacted;
- Share of cross-border turnover for businesses;
- Share of businesses becoming 'certified taxable persons';
- Impact on VAT revenues
- Compliance costs in the EU;
- Costs of implementation;
- Cash flow implications.

B.4.1 Share of VAT Gap reduced by introduction of definitive regime

To estimate the impact of split payment on the reduction of The VAT Gap the study first aims to understand what impact moving to a definitive regime would have. In doing so it is essential to identify the element of the VAT Gap that is MTIC Fraud.

Missing Trader Intra Community Fraud

A significant proportion of the VAT Gap is attributed to MTIC fraud. The 'destination principle' study found that it is the single most costly kind of VAT fraud to the EU. Both the 'destination principle' study and the 2010 study estimate the proportion of the VAT Gap attributed to MTIC. While the 'destination principle' study estimated MTIC fraud costs revenue authorities between EUR 43 5 billion (23.3%) and EUR 53 billion (27.5%) annually[196], the 2010 study has estimated this impact to be lower.

The 'destination principle' study estimates are based on the following:

- Data collected from nine Tax Authorities estimated on average 36% of the VAT Gap was attributed to fraudulent activities.
- Three respondents explained that the fraud portion of the VAT Gap was entirely due to MTIC, while the other six said only a proportion was due to this.
- The study estimated that on average, 20% of the overall VAT Gap is due to MTIC fraud, while the weighted average (based on overall VAT Gap proportion) was 24%[197].

The 2010 study however uses data from the UK to estimate the VAT Gap that is attributed to MTIC in 2009. Its method and results are as follows:

[196] EY study commissioned by the European Commission, Implementing the 'destination principle' to intra-EU B2B Supplies of Goods, TAXUD/2013/DE/319, 30 June 2015, pp. 13-14. MTIC Fraud based on 2011 VAT Gap estimates of EUR 193 billion.
[197] Estimate is based on eight of the nine countries as one country was not able to provide a breakdown of the proportion of fraud attributed to MTIC fraud.

- Proportion of the VAT Gap in the UK attributed to MTIC: 17% - 26%
- UK benchmark applied to EU-27 VAT Gap estimates: EUR 19.8 billion – EUR 30.8 billion

As mentioned in Section 6.3.3 discussions with subject matter experts raised concerns over accuracy of the 2010 study estimate and hence the 'destination principle' study estimates are deemed more appropriate. Therefore, using this studies estimate of the VAT Gap across the EU of EUR 150 billion combined with the destination principle percentage estimates, the proportion of the VAT Gap that is attributed to MTIC fraud is between EUR 35.0 billion and EUR 41.2 billion (23-27%).

B.4.2 Reducing the VAT Gap

Under a definitive regime, though there will still be an opportunity for MTIC fraud to occur, the 'destination principle' study has anticipated that this will be significantly reduced in scale. The magnitude of this reduction will be influenced by a number of factors, one of which is the mark up applied by businesses on their purchases.

According to estimates in the 'destination principle' study, assuming a uniform mark up on cross border goods by businesses across the EU[198], under the implementation of the definitive regime the MTIC Gap could reduce by 83% to an estimated EUR 8 Billion. This reduction of EUR 41 billion is equivalent to 4.53% of total VAT revenues[199]

Using the estimated 83% reduction of MTIC fraud under the definitive regime, the VAT Gap under this study's alternative baseline can be calculated. It is therefore assumed that moving to a definitive regime will reduce the VAT Gap by between EUR 29.1 billion and EUR 34.2 billion. For the purposes of the study an average of the range of impact is taken and applied to the VAT Gap across the EU. It is therefore assumed that the application of a definitive regime will result in a reduction of the VAT Gap of EUR 31.7 billion. The table below provides the new baseline estimates.

Table 63: VAT Gap (alternative baseline), based on the introduction of a definitive regime

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
Distribution of the VAT Gap	3-8%	4-6%	28-47%	28-35%	4-38%

[198] 20% manufacturing sector mark-up is used based on the European Central Bank working paper: 'Mark-ups in the euro area and the US over the period 1981-2004. A comparison of 50 sectors'

[199] EY study commissioned by the European Commission, Implementing the 'destination principle' to intra-EU B2B Supplies of Goods, TAXUD/2013/DE/319, 30 June 2015, pp. 17

	Missing trader intra-community frauds	Threshold fraud	Non-compliance (including suppression fraud)	VAT avoidance schemes	Other components (e.g. repayment fraud, insolvencies)
VAT Gap (EUR min)	3.4 billion	5.2 billion	32.6 billion	32.6 billion	44.7 billion
VAT Gap (EUR max)	9.6 billion	6.9 billion	55.4 billion	41.6 billion	4.9 billion

Source: Deloitte analysis

B.4.3 Impact on VAT revenues

The definitive VAT regime does not change the VAT treatment of domestic transactions, but will change the VAT rules on intra-EU cross-border B2B supplies by application of the destination principle. As currently suggested, the definitive regime would change also VAT collection rules by obliging the supplier to charge VAT on B2B supply of goods to non-certified taxable person (using one-stop-shop (OSS) for declaration and payment), whilst applying reverse charge on B2B supplies to certified taxable persons (as currently applied on intra-EU services).

Therefore VAT will now be applied to these types of transactions and VAT revenues initially collected by the Member State of the supplier will increase. However, the VAT collected on these transactions will be distributed by this Member State to the Member States of destination, which then refund the received VAT to the business customers (in their own Member State). Therefore, the definitive regime will increase the gross VAT revenue collected by Member States. However this is then distributed to the other Member States which refund the businesses in their own countries.

The definitive regime will also increase the net VAT revenues due to a reduction in the VAT Gap, as described above.

B.4.4 Share of cross-border turnover for businesses

There is currently no data on the percentage of total B2B businesses turnover that comes from cross border trade. Using data from a Flash Eurobarometer study on the internationalisation of SMEs[200] one can compare the percentage of B2B businesses turnover that comes from cross border across different business sizes to develop an estimate.

[200] Flash Eurobarometer 421, Internationalisation of Small and Medium-sized Enterprises (2015)

Percentage of B2B turnover that comes from cross border trade

Table 64 – Percentage of B2B turnover that comes from cross border trade

Business size	Percentage of B2B businesses that turnover comes from cross border trade
Micro (<€2m)	23%
Small (€2m to €10m)	25%
Medium and above (>€10m)	28%
Large (subset of "medium and above", >€50m)	28%
Average	27%

Source: Flash Eurobarometer 421, Internationalisation of Small and Medium-sized Enterprises (2015)

Given the table above, it is assumed that the proportion of B2B sales that are intra-EU is equal to the weighted average of 27%.

B.4.5 Share of businesses being 'certified taxable persons'

The assumption for the percentage of certified businesses has been provided by the Commission. It has been agreed that the percentage of certified businesses across the EU is assumed to be between 70-95%.

The scenarios chosen (70 and 95%) are taken as an example to illustrate what could be the order of magnitude of the cash-flow impact. As such this can in no way be taken as an indication as to what the percentage would be under the forthcoming proposals on the definitive regime.

In addition, an assumption is needed regarding how this relates to the relevant revenues. As there is no data related to this assumption, a 1:1 ratio is assumed.

B.4.6 Administrative burden in the EU

It is considered that there will be specific cost implications linked to the introduction of the VAT definitive regime. However, such costs are not linked to the implementation of split payment mechanisms per se, but rather to the introduction of the definitive regime. Therefore, they are outside the scope of the exercise.

See Annex C for the specific methodology applied for the assessment of the administrative burden.

B.4.7 Implementation costs

It is considered that the implementation of the VAT definitive regime will lead to specific costs for businesses (incl. changes to IT systems, training, etc.). However, such costs are not linked to the implementation of split payment mechanisms per se, but rather to the introduction of the definitive regime. Therefore, they are outside the scope of the exercise.

B.5.8 Cash flow impacts

Tax flow implications for businesses

Under Options 5-7, cross-border B2B exports to businesses that obtain CTP status are unaffected by the destination principle and the exporter's cash flows from these transactions continue to be reverse-charged.

All other cross-border B2B transactions are taxable and importers will experience a negative cash flow effect as previously VAT exempt transactions are now subject to VAT, with refund payments taking time to be processed.

Domestic transactions behave analogously to Options 1, 3 and 4, respectively.

Tax flow implications for tax authorities

Tax authorities experience a positive cash flow from split payment under the definitive regime as VAT arising from previously reverse-charged transactions is now transferred immediately, while it is refunded at a later stage.

Annex C - Methodology for Assessment of the Administrative Burden

This section presents the methodology and assumptions used to assess the policy options with regard to the impact on the administrative burden. The section provides detailed explanations of the sources used, the approach adopted, the assumptions made and their basis.

C.1 Introduction

The quantification of the administrative burden for EU businesses and public bodies is an important component of the study. In keeping with the European Commission's Guidelines and Terms of Reference, this study uses a methodology that is closely linked to the **Standard Cost Model (SCM)** methodology with some deviations due to the specificities of the topic.

The **SCM** was developed by the Dutch ministry of Finance and is used to measure the administrative burden imposed on businesses and/or citizens through the need to comply with regulation. The SCM identifies **Information Obligations (IOs),** or tasks associated with regulation which require the delivery of information to public authorities or third parties. The SCM provides a simplified and consistent method to measure the impact of regulation. It is used across several Member States and is part of the EU's tool kit for assessing administrative costs imposed by EU legislation.

<u>Standard Cost Model:</u>
Administrative burden = Time*Price*Quantity (amount x frequency)
Time: The time spent by the citizen or the employee in the enterprises to comply with an IO
Price: The standard cost to apply to the time spent according to the level of the employee who performs the IO (Information Obligation).
Quantity: The number of IOs to perform per year and their frequency (e.g. monthly, yearly)

The SCM approach generally seeks to present the costs of a 'typical' EU business (defined by the European Commission as ideal type and normally efficient[201]). In previous studies applying the SCM, we found that the 'typical' business was easier to establish since the subject-matter was sufficiently narrow so as to allow for a sample of companies that are more similar in terms

[201] See the European Commission's SCM guidelines at http://ec.europa.eu/smart-regulation/guidelines/tool_53_en.htm

of industry and size. The split payment mechanism however has the potential to impact every business in the EU and is thus the **impacts (in terms of administrative burden) would vary significantly between different business sizes and industries**. For this reason, the concept of one 'typical' business costs in the SCM was not applied for the calculations. Rather, estimates were calculated according to a 'typical' business within a number of different turnover categories. The **turnover categories** are as follows:

- Less than EUR 5 000
- EUR 5 000 to 50 000
- EUR 50 000 to 100 000
- EUR 100 000 to 500 000
- EUR 500 000 to 2 000 000
- More than EUR 2 000 000

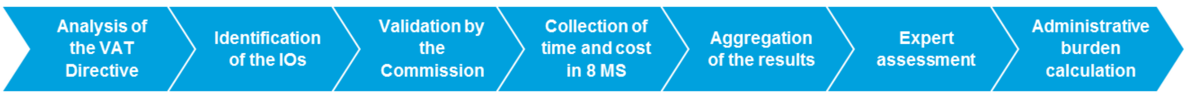
We have discovered that the time spent on VAT obligations and their frequency also differ across business industries. However, conducting the SCM through both turnover category and industry would lead to an even larger set of assumptions for the calculations. For this reason, we have not conducted further calculations based on business industry.

C.2 Objectives, scope and sources for the SCM

C.2.1 Summary of the SCM approach

The SCM first identifies the IOs resulting from the EU VAT legislation a **'typical', VAT registered EU business** has to comply with. It then estimates the costs related to these IOs. Figure 66 below outlines the steps in the analysis.

Figure 66: Process for measuring the administrative burden



- The **VAT Directive (2006/112/EC Directive)** was consulted to identify the IOs VAT-registered businesses must comply with, as well as recent studies on VAT-related IOs for businesses. Deloitte tax experts were also involved in the identification of relevant IOs for businesses currently and the IOs that would be introduced with each of the options. The list was initially quite broad since there are many IOs that businesses need to comply with due to VAT. However, **a shorter list was compiled** based on the specificities of this topic and the potential impacts of the split payment mechanism. A list was compiled and validated by the European Commission. The list is presented in detail in the following section.
- Interviews were conducted with businesses and public bodies across **eight Member States**: Austria, Belgium, Bulgaria, Estonia, Ireland, Italy, Poland, and Portugal.

- **Businesses and public bodies** were interviewed, including large, medium and small businesses across a variety of sectors. Businesses and public bodies were asked how much time they spend on each IOs and whether there were additional costs incurred (for example outsourcing costs).
- The results from the interviews and data from recent studies were aggregated to represent a “typical” EU company. The results from the “typical” EU company were further granulated by **business turnover category** to provide a more realistic result.
- Results were critically assessed by **Deloitte VAT experts** who have worked across multiple EU markets. These experts also provided input into the assumptions used in the calculations, including the frequency of VAT obligations (based on the requirements across Member States) and the typical costs associated with outsourcing these obligations.
- The **burden of the businesses** within each turnover category per each option was estimated.

C.2.2 Data and assumptions

Data for the exercise came from a variety of sources:

- Real data from business interviews;
- Data provided by Member State tax authorities;
- Eurostat statistics;
- Commission’s official guidelines and standardised data (for hourly costs);
- Expert assessments.

Data from interviews and recent studies

Data on IOs came from interviews with real businesses in eight Member States, as well as recent studies conducted on VAT obligations in the EU[202]. Businesses were identified and contacted using a variety of channels, such as the Deloitte network, business representative organisations (both at EU and national level), and chambers of commerce.

Data provided by Member State authorities and Eurostat

Data on hourly earnings is provided by Eurostat[203]. Specifically, hourly rates for the category ISCO 2, i.e. for management accounts, were used, as they make up the personnel responsible for VAT-related procedures in businesses. Management accountants are classified under the code 2411 in the International Standard Classification of Occupations elaborated by the ILO.

[202] Notably Deloitte’s study on VAT Aspects of cross-border e-Commerce and the Assessment of special VAT schemes for SMEs.

[203] See: http://ec.europa.eu/eurostat/web/products-datasets/-/earn_ses_hourly . The most recent figures date back to 2010, but given the economic crisis, figures are considered still quite accurate by the Commission’s services consulted on the topic. Updated hourly earnings should be elaborated by Eurostat by the end of 2015,

Data on the number of VAT-registered businesses was obtained from Eurostat and Enterprise and directly from Member State tax authorities (see Annex B – Sections B.3.2 for the estimation methodology on the number of businesses impacted).

C.3 Information Obligations (IOs) used for the analysis

The table below provides the overview of the **IOs used in the SCM baseline**. The relevant IOs were identified through the current literature and interviews with Deloitte's tax practitioners, and discussed and agreed upon with the Commission in the Inception Phase of the study. In addition, the list of IOs was validated by both national tax authorities and the businesses interviewed. These IOs do not apply to public bodies in the baseline.

Table 65: Information Obligations used in the Standard Cost Model (baseline)

IO#	Type of obligation	Frequency	Description for businesses
IO1	VAT registration	One-off	This IO consists of the one-off registration for VAT purposes in the Member State where the business is established. This includes all tasks necessary to complete the registration such as communication with the relevant authorities and the provision of evidence of taxable activities.[204]
IO2	Invoicing	Transactional	This IO consists of the invoicing for each transaction in accordance with the business' home country rules.
IO3	VAT declaration/ returns	Depending on the Member State: Monthly/bi-monthly/quarterly/annual	This IO consists of the periodical submission of the domestic VAT return and preparatory tasks.
IO4	VAT payment	Depending on the Member State: Monthly/quarterly/annual	This IO consists of the periodical payment of the VAT related to the business' domestic VAT return.

Source: Deloitte analysis based on desk research and interviews with businesses

Based on the impact analysis, two additional IOs were identified when the split payment mechanism comes into play (i.e. not in the baseline). These IOs are also valid for public bodies when a split payment is introduced:

Table 66: Information Obligations deriving from the Split Payment Mechanism

IO#	Type of obligation	Frequency	Description for businesses and public bodies
IO4a	Split Payment of VAT	Transactional	This IO consists of the payment of the VAT amount directly to the tax authority when paying the supplier invoice.

[204] Waiting time is not calculated in the Standard Cost Model (SCM), e.g. time for the tax authorities to reply to requests, to finalise the registration, etc.

IO#	Type of obligation	Frequency	Description for businesses and public bodies
IO5	Split Payment Sales List / Purchase List	Monthly	Transactions that are subject to split payment must be recorded in a sales / purchase list and submitted to the tax authorities every month. This IO was introduced as part of the design of the options for split payment in order to provide tax authorities with an instrument to reconcile transactions subject to VAT.

Source: Deloitte analysis

C.4 Calculation of the administrative burden

Information from the interviews and other recent studies was merged to create the 'typical' EU business in each of the turnover categories. This was done by averaging the costs of each IO across the different types of businesses. The formula below denotes this process mathematically:

$$Average\ cost = \frac{1}{N}\sum_{N}(Time_N * \ Wage_N\ )$$

where N is the number of businesses in the sample per each Member State (and then the number of Member States).

Figure 67 represents a simplified diagram of **how inputs into the SCM are used to calculate total administrative costs**. Information on price per action is obtained from the business interviews and desk research, while information on total number of actions comes from third-party sources and expert assessments. Similar calculations are performed for each IO and the results are aggregated together.

Figure 67: Basic SCM calculation

Source: Deloitte elaboration

Data on the **number of VAT registered businesses** was obtained from Eurostat, the Deloitte SME schemes study and Member State tax authority data. These figures were applied to each policy option depending on the groups of businesses that are impacted (see Annex B – Sections B.3.2 for the estimation methodology on the number of businesses impacted).

The analysis of the administrative burden for businesses also includes costs that businesses face **outsourcing** VAT-related obligations to accountants/advisors. Based on evidence collected in previous studies, it is assumed that a large number of businesses have **external advisors/accountants** to support them with tax-related issues (VAT, but also for income taxes and social security). The costs of accountants/advisory services vary across countries, based on differences in income, but also on the number and complexity of the administrative tasks to be performed under each system. Outsourcing costs are attributed to the individual IOs based on data collected.

As mentioned above, and consistently with the SCM methodology, we used **expert judgement and available literature** to support our analysis and inform the assumptions necessary to apply the SCM when data from primary sources and literature were insufficient or not applicable. We involved VAT experts and IT experts in order to validate the assumptions of our analysis, based on the competencies needed to address the different points.

The results from the SCM were **cross-checked using expert judgement findings** from existing literature, including recent studies carried out for the European Commission, DG TAXUD, on VAT-related topics[205]. It should be noted, however, that figures from existing studies are not necessarily directly comparable, as other studies may be measuring different things and using different approaches. Caution was therefore exercised in applying these figures.

C.5 General Assumptions

For each of the IOs (in the baseline and additional IOs in the policy options), the associated cost will depend upon:

- The hourly costs per IO;
- The frequency of IOs;
- The number of businesses and public bodies impacted by the option;
- The volume and type of transactions impacted (e.g. for IO2 invoicing).

As the proposed policy options build on each other, some **common assumptions** are required throughout to estimate the impacts on stakeholders and the economy. These are outlined and explained in turn below. Assumptions specific to individual policy options are explained thereafter.

C.5.1 Hourly costs for the standard cost model

A key parameter for the calculation of administrative burden using the SCM is the **labour costs of the personnel** having to carry out the tasks for businesses to comply with the information obligations identified as relevant.

The hourly wage rates for the category ISCO 2, i.e. for management accountants, are used as they make up the personnel responsible for VAT-related procedures in businesses. Management accountants are classified under the code 2411 in the International Standard Classification of Occupations elaborated by the International Labour Organisation (ILO). Based on 2010 figures, the **EU average hourly costs are EUR 32.1**, which already includes the 20% overhead costs, as indicated by the Commission's Impact Assessment Guidelines.

[205] The full list of references used is provided in Annex A

C.5.2 Frequency of IOs

As stated above, the overall administrative costs for businesses depends (among other factors) on the **frequency of the IOs**. The design of some of the policy options impacts on the frequency of some IOs, namely IO2 invoicing and IO4a Split Payment of VAT. The frequencies of IO1 VAT Registration, IO3 VAT Return, IO4 VAT Payment and IO5 Split payment sales and purchase list are not impacted by the different policy options.

IO1 VAT Registration

The frequency of VAT registration is always **"one off".** For calculating the annual administrative burden, the VAT registration for a business is applied as occurring once in ten years. This frequency is also in line with other recent studies on VAT compliance costs[206].

IO3 VAT Return

IO3 refers to a business's **periodical submission of domestic VAT returns and preparatory tasks.** This administrative task varies significantly between business size and industry. Based on desk research and expert assessment, we have therefore applied the following assumptions for the frequency of VAT return submissions per year per business category:

Table 67: General assumption - frequency of domestic VAT return

Business turnover category	Average frequency of domestic VAT return
less than 5 000	Once per year
from 5 000 to 50 000	2 times per year
from 50 000 to 100 000	4 times per year
from 100 000 to 500 000	4 times per year
from 500 000 to 2 000 000	6 times per year
More than 2 000 000	12 times per year

Source: Deloitte analysis based on desk research and interviews with businesses

This frequency is also in line with other recent studies on VAT compliance costs[207].

IO4 VAT Payment

IO4 refers to a business's periodical payment of VAT related to its domestic VAT return. The frequency of the payment is therefore linked with the VAT return (IO3).

Table 68: General assumption - frequency of domestic VAT Payment

Business turnover category	Average frequency of domestic VAT payment
less than 5 000	Once per year
from 5 000 to 50 000	2 times per year
from 50 000 to 100 000	4 times per year
from 100 000 to 500 000	4 times per year

[206] Notably Deloitte's study on VAT Aspects of cross-border e-Commerce and the Assessment of special VAT schemes for SMEs.
[207] ibid.

Business turnover category	Average frequency of domestic VAT payment
from 500 000 to 2 000 000	6 times per year
More than 2 000 000	12 times per year

Source: Deloitte analysis based on desk research and interviews with businesses

This frequency is also in line with other recent studies on VAT compliance costs[208].

IO5 Split payment sales and purchase list

IO5 is an IO introduced in Option 1 (i.e. it does not feature in the baseline). As explained in the description of the policy options (Section 6 Main body of report), as the customer pays VAT for the supplier's taxable supplies, it is considered necessary to provide the tax authority with additional information to enable the tax authority to validate and control the VAT payments. Therefore, it is foreseen that the **supplier and customer communicate certain information to the tax authority with respect to the taxable transactions and respective VAT payments** within the scope, mentioning also the supplier's/customer's VAT registration number and the VAT amounts paid. Such declaration is assumed to be made **every month** irrespective of the size of the business/public body.

C.5.3 Number of businesses impacted by the Policy Options

The SCM is also dependent on the **number of businesses impacted by the option**. For these purposes, it is assumed that all VAT registered businesses in the Member States would be impacted by the options, except where the Member State is applying a Generalised Reverse Charge Mechanism (GRCM). The methodology for estimating the number of businesses impacted by each option is presented in Annex B - Section B.3.2.

For the SCM, the calculation of the overall costs is weighted in accordance with the number of VAT registered businesses within the turnover categories. The table below presents the number of businesses within each turnover category.

Table 69: Number of VAT-registered businesses in turnover categories

Business annual turnover	Number of businesses in the EU
Less than EUR 5 000	6 723 168
EUR 5 000 to 50 000	9 525 238
EUR 50 000 to 100 000	3 780 781
EUR 100 000 to 500 000	5 807 553
EUR 500 000 to 2 000 000	1 923 350
More than EUR 2 000 000	943 632
Total number of businesses	**28 703 722**

Source: Deloitte analysis based on desk research and interviews with businesses

[208] ibid.

C.5.4 Number of public bodies impacted by the Policy Options and number of transactions

Public bodies are generally referred to as national, regional or local government or any other body governed by public law. As this definition can cover a very broad range of bodies across the EU depending on the Member State concerned, a **strict definition of public body was adopted for the purposes of this study**.

Thus, public bodies can be understood within the context of the calculations as *only* bodies of national, regional or local government. Other bodies governed by public law in some Member States (e.g. hospitals, schools etc.) are not taken into account for the calculations. This is in line with the general provision of the VAT Directive with regard to public bodies as non-taxable persons and related exceptions[209].

The **definition** of public body is very **heterogeneous across Member States** in terms of classifications of public bodies and the extent to which they are publically "funded" by the State. In some cases, the public sector (i.e. central and local government) is separate from organisations that are classed as "public bodies"[210]. Further, some organisations can be of both public and private nature (or mixed) and differ even between subsidiaries of those organisations. Overall, we found that attempts to form a common classification of public bodies across the EU for the purposes of this study were fruitless. There is a **general lack of consolidated and reliable data on the classification and number of public bodies across the Member States** and thus, we refrained from making additional assumptions and estimations. To adopt the most common definition for public body, we have therefore only calculated assumptions based on bodies of national, regional or local government.

With respect to **public-owned corporations** (e.g. hospitals, electricity service providers, television & radio services, banking, insurance companies etc.), these have been included in the number of businesses (see Annex B - Section B.3.2).

We have therefore adopted an approach to **quantify the number of public bodies** based on categories of Member States – small, medium, large. It is assumed that the number of public bodies corresponds to the size of the Member State. The categorisation below is based on the weighting of votes in the Council of the EU[211]

- **Small** (12) - Denmark, Finland, Ireland, Slovakia, Lithuania, Luxemburg, Latvia, Estonia, Slovenia, Cyprus, Malta, Croatia.
- **Medium** (10) – Romania, Netherlands, Belgium, Portugal, Greece, Czech Republic, Hungary, Sweden, Austria, Bulgaria.
- **Large** (6) – United Kingdom, France, Italy, Spain, Poland, Germany.

[209] See: https://ec.europa.eu/taxation_customs/business/vat/eu-vat-rules-topic/taxable-persons-under-eu-vat-rules_en
[210] E.g. in the UK, public bodies are separate from central and local government as well as public corporations. In some cases, public bodies may be registered as charities. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519571/Classification-of-Public_Bodies-Guidance-for-Departments.pdf pg 5.
[211] http://www.consilium.europa.eu/en/council-eu/voting-system/qualified-majority/

We conducted desk research on the number of public bodies (i.e. national, regional or local government) in a number of Member States. Based on the data available, we have assumed a number of public bodies per Member State size. The table below shows the main assumption for this calculation. The overall weighted average number of public bodies in the EU is 94 600.

Size of MS	No. of MSs	No. of public bodies per MS	Total no. of public bodies
Small	12	800	9 600
Medium	10	2500	25 000
Large	6	10000	60 000
		Weighted average:	**94 600**

Source: Deloitte analysis

Regarding, **the transactions for public bodies**, we maintained a conservative approach regarding the transactions that would fall within the scope of split payment, once again in line with the general provision of the VAT Directive on exceptions for taxation of public bodies[212]. In fact, the mandate of public bodies differs greatly among Member States; for instance, only in some countries local public bodies are responsible for the maintenance of schools and hospital buildings.

Therefore, we have aligned the definition and the taxable services of public bodies with the VAT Directive i.e. activities of public bodies carried out in their capacity as public authorities. This would exclude public sector activities of scale, private sector activities and other exempt activities (as described under Article 132 VAT Directive).

C.5.5 Type of business transactions impacted

The policy options include different types of transactions from EFT to credit card and cash. Based on interviews with businesses and experts, the following proportions of EFT, credit card and cash payments are assumed:

Table 70: Share of transactions completed through EFT, Credit Card and Cash

Payment Type	% of transactions paid for by business
EFT	90%
Credit Card	9%
Cash	1%

Source: Deloitte analysis

[212] See: https://ec.europa.eu/taxation_customs/business/vat/eu-vat-rules-topic/taxable-persons-under-eu-vat-rules_en

C.6 Option 0: Baseline

C.6.1 Frequency of IOs

IO2 Invoicing

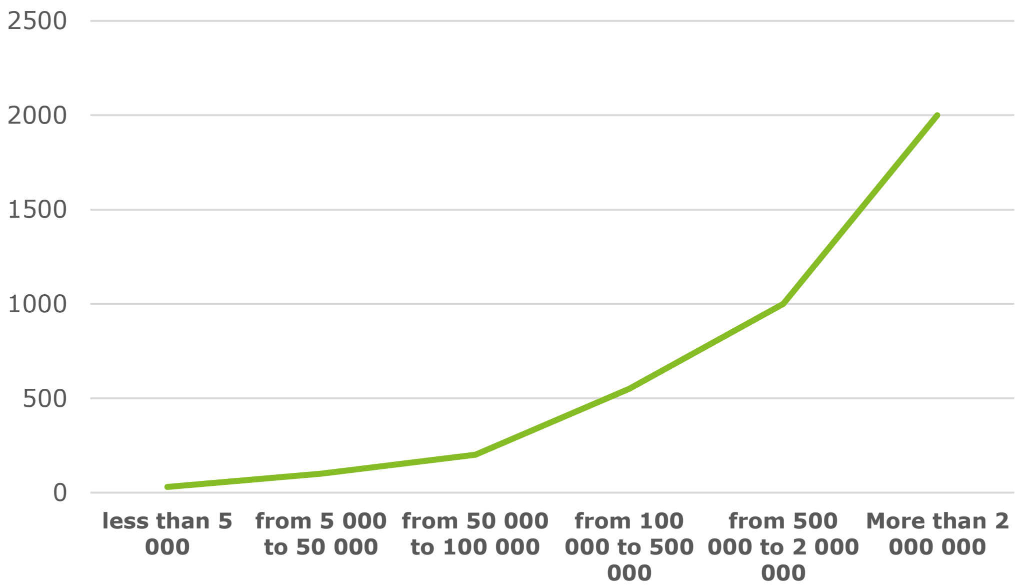
IO2 refers only to a business's sales invoices since the seller is obliged to provide a VAT invoice to its purchaser. The number of invoices per business varies significantly between business size and industry. Based on desk research and expert assessment, we have therefore applied the following assumptions for the number of B2B sales invoices per year per business category:

Table 71: General Assumption - Frequency of invoicing

Business turnover category	Average number of B2B domestic sales invoices
less than 5 000	30
from 5 000 to 50 000	100
from 50 000 to 100 000	200
from 100 000 to 500 000	550
from 500 000 to 2 000 000	1000
More than 2 000 000	2000

Source: Deloitte analysis

Figure 68: Number of domestic sales invoices per turnover bracket



Source: Deloitte analysis

As shown by the figure above, the number of invoices is assumed to increase more than proportionally per turnover bracket.

Given the large variance of invoices across sectors of economic activities and the lack of consolidated statistics, there is inherent uncertainty around those figures. The main assumptions described in Table 71 are subject to sensitivity analysis (+/- 20%).

C.7 Option 1: Current VAT regime with split payment applying to electronic financial transfers (EFT) between taxable persons (B2B)

C.7.1 Frequency of IOs

IO4a Split Payment of VAT

IO4a is a new IO compared to the baseline. When it comes to the splitting of VAT in the split payment mechanism, the number of transactions is a key variable. To estimate the number of transactions that would be subject to split payment, we used assumptions on average number of purchase invoices received by a business. It is assumed that a business has the same number of sales invoices as purchase invoices. We understand that there are many differences between businesses on the number of sales and purchase invoices and that they are not necessarily close in number to each other. However without accurate data from all businesses in the EU on their number of sales and purchase invoices, this assumption is considered as the most appropriate one to adopt.

Since the split payment mechanism only applies to B2B EFT transactions, not all purchase invoices will be relevant. It is therefore assumed that 90% of B2B invoices are paid via EFT (based on interviews with businesses and experts). The table below presents the assumptions on the number of Split payment transactions per each business turnover category. It should be noted also that these figures are also subject to sensitivity analysis, consistently with the sensitivity analysis performed on the main assumption on the overall number of invoices (sensitivity analysis is provided in Annex E).

Table 72: Option 1 - Assumptions on number of transactions subject to split payment

Business turnover category	No. of split payment transactions per year
less than 5 000	27
from 5 000 to 50 000	90
from 50 000 to 100 000	180
from 100 000 to 500 000	495
from 500 000 to 2 000 000	900
More than 2 000 000	1800

Source: Deloitte analysis

C.7.2 Time spent on IO4a Split Payment of VAT

Regarding the time required to conduct the split payment, it is assumed that **2 minutes** is spent on each transaction. This assumption is based on the practical sending of a payment online. As the split payment is made at the time of the invoice payment, it is assumed that some efficiencies are gained with regard to assessing the invoice and logging into an online bank account, which would already be done at the time of paying the invoice.

C.7.3 Time spent on IO5 Split Payment sales and purchase list

Since this is a new obligation, certain assumptions must be made on the time that it will take to complete such a reporting obligation. The assumptions in the table below are based on the identification of other similar tasks in the Member States and on the judgement of VAT experts.

Table 73: Option 1 – Assumptions on the time taken to complete IO5 Split Payment sales and purchase list

Business turnover category	Estimated time for monthly sales & purchase list
less than 5 000	30 minutes
from 5 000 to 50 000	50 minutes
from 50 000 to 100 000	80 minutes
from 100 000 to 500 000	120 minutes
from 500 000 to 2 000 000	160 minutes
More than 2 000 000	280 minutes

Source: Deloitte analysis

C.8 Option 1(b) - Current VAT regime with split payment applying to electronic financial transfers (EFT) between taxable persons (B2B) + blocked VAT bank account

Option 1(b) building on option 1 and includes a blocked VAT bank account. Overall, the IOs remain relatively the same as in Option 1 but with a small increase in the cost for IO3 VAT Return, associated with the additional time needed to manage the blocked VAT bank account. The assumptions for each IO are therefore the same as Option 1 above.

C.8.1 Time spent on IO3 VAT Return

The additional time to be spent on the VAT return due to the management and processing of data in the blocked VAT bank account is assumed for each turnover bracket as follows:

Table 74: Option 1(b) - assumptions on additional time spent on IO3 VAT Return

Business annual turnover	Additional time spent on VAT return
Less than EUR 5 000	+20 minutes
EUR 5 000 to 50 000	+20 minutes
EUR 50 000 to 100 000	+30 minutes

Business annual turnover	Additional time spent on VAT return
EUR 100 000 to 500 000	+40 minutes
EUR 500 000 to 2 000 000	+50 minutes
More than EUR 2 000 000	+60 minutes

Source: Deloitte analysis

C.9 Option 2 - Option 1 combined with a generalised reverse charge mechanism in certain Member States

The design of Option 2 is the same as Option 1 except that the split payment mechanism doesn't apply to Member States that are applying a GRCM. The assumptions therefore remain the same with respect to the IOs. However the number of businesses impacted is different.

C.9.1 Number of Businesses impacted

Based on discussions with the Commission, It is assumed that Austria and Czech Republic apply the GRCM and the number of businesses impacted is therefore reduced with these two Member States.

Table 75: Option 2 - assumption on the number of businesses impacted

Business annual turnover	Number of businesses in the EU
Less than EUR 5 000	6 305 900
EUR 5 000 to 50 000	9 244 769
EUR 50 000 to 100 000	3 658 983
EUR 100 000 to 500 000	5 596 560
EUR 500 000 to 2 000 000	1 837 046
More than EUR 2 000 000	898 055
Total number of businesses	**27 541 313**

Source: Deloitte analysis

See Annex B – Section B.3.2 for the estimation methodology on the number of businesses impacted.

C.10 Option 3 - Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)

Option 3 builds on option 3 and further extends the application of the split payment mechanism to B2C and B2G transactions. The administrative burden for this option differs from the others as it places some burdens on public bodies.

C.10.1 Frequency of IOs

IO2 Invoicing

As mentioned above, invoicing is impacted differently in some of the options. As Option 3 includes the application of split payment to B2G and B2C transactions, the number of purchase invoices impacted will increase. In B2C transactions, the supplier is not obliged to provide an invoice. The table below presents the number of B2G sales assumed per year per business category, which is then added to the total number of invoices considered in the calculations.

Table 76: Option 3 – assumptions on volume of invoices (including B2G)

Business turnover category	Average number of B2G sales	Total number of invoices for Option 3
less than 5 000	5 B2G sales	30
from 5 000 to 50 000	16 B2G sales	125
from 50 000 to 100 000	50 B2G sales	250
from 100 000 to 500 000	90 B2G sales	650
from 500 000 to 2 000 000	180 B2G sales	1200
More than 2 000 000	300 B2G sales	2300

Source: Deloitte analysis

For this IO, we have also applied a different weighting to each turnover category regarding the number of businesses impacted. It is unreasonable to assume that all businesses would have B2G sales. We have therefore assumed that a proportion of businesses in each category would have additional B2G sales:

Table 77: Option 3 – assumptions on number of businesses selling B2G

Business turnover category	Number of businesses in category	% of businesses selling B2G	Number of businesses selling B2G
less than 5 000	6 305 900	5%	315295
from 5 000 to 50 000	9244769	8%	739581.5
from 50 000 to 100 000	3658983	15%	548847.4
from 100 000 to 500 000	5596560	23%	1287209
from 500 000 to 2 000 000	1837046	32%	587854.7

Business turnover category	Number of businesses in category	% of businesses selling B2G	Number of businesses selling B2G
More than 2 000 000	898055	40%	359222

Source: Deloitte analysis

In more detail, the number of B2G transactions is estimated based on the combination of two parameters. First, the average number of B2G invoices per turnover bracket, which is assumed to range from 5 to 300; second, the share of businesses that perform B2G transactions per each turnover bracket (which is estimated to range from 5% to 40%). Both parameters are assumed to increase more than proportionally with the turnover bracket.

As for the other assumptions on the number of invoices, the figures will be subject to sensitivity analysis.

IO4a Split Payment of VAT

The frequency of the split payment of VAT for each of the options increases significantly under Option 3 because the mechanism now applies to B2C transactions. As explained in the Policy Option design (Section 6 Main Body of the Report), the seller in a B2C transaction will still account for the payment of the VAT to the tax authority. The VAT payment for B2C transactions is made by the business through daily payments, as opposed to transactional basis. Each business, across all turnover categories, will have 310 more payments to make per year. This figure is calculated as follows:

- 365 days in a year – 1 day per week of mandatory closing – 3 public holidays.

Finally, it is assumed that all payments related to B2G transactions will be carried out via EFT, due to public procurement rules which impose traceability of payments.

Thus, the number of split payments of VAT to be conducted by businesses on an annual basis are as follows:

Table 78: Option 3: assumptions on number of split payments (including B2G and B2C sales)

Business turnover category	Number of B2B invoices	Number of B2G sales	Number of Payments due to Consumer sales	Total number of split payments (90% of B2B & B2G sales + daily payments)
less than 5 000	30	5	310	337
from 5 000 to 50 000	100	25	310	423
from 50 000 to 100 000	200	50	310	535
from 100 000 to 500 000	550	100	310	895
from 500 000 to 2 000 000	1000	200	310	1390
More than 2 000 000	2000	300	310	2380

Source: Deloitte analysis

C.10.2 Time spent on IO5 Spit Payment Sales and Purchase List

The split payment sales and purchase list will have to take into account the applicability of split payment to B2G and B2C transactions, meaning that the sales and purchase list is likely to get longer and therefore more costly. The table below presents the assumptions for the time that would be spent on the split payment sales and purchase list, based on expert judgement

Table 79: Option 3 - assumptions on additional time spent on Split Payment Sales & Purchase List

Business turnover category	Time for Sales and Purchase List	Additional time compared to option 2
less than 5 000	40 minutes	+10 minutes
from 5 000 to 50 000	70 minutes	+20 minutes
from 50 000 to 100 000	110 minutes	+30 minutes
from 100 000 to 500 000	160 minutes	+40 minutes
from 500 000 to 2 000 000	210 minutes	+50 minutes
More than 2 000 000	340 minutes	+60 minutes

Source: Deloitte analysis

C.10.3 Time spent on IO3 VAT Return

With the increase in the number of transactions that are subject to split payment, the time taken for a business to complete its periodic VAT return will also increase. The additional time to be spent on the VAT return due to the higher volume of split payment transactions is assumed for each turnover bracket as follows:

Table 80: Option 3 - assumptions on additional time spent on IO3 VAT Return

Business annual turnover	Additional time spent on VAT return compared to Option 2
Less than EUR 5 000	+10 minutes
EUR 5 000 to 50 000	+20 minutes
EUR 50 000 to 100 000	+40 minutes
EUR 100 000 to 500 000	+60 minutes
EUR 500 000 to 2 000 000	+90 minutes
More than EUR 2 000 000	+120 minutes

Source: Deloitte analysis

C.10.4 Public Body Costs

Public bodies are only affected by the split payment mechanism in Option 3 and therefore and not included in the costs of the other options. The following IOs apply to public bodies:

Table 81: Option 3 - IOs for Public Bodies

IO#	Type of obligation	Frequency	Description for public bodies
IO1	VAT registration	One-off	Public bodies normally do not have the go through the same process as a business in registering their business for VAT but rather a simplified type of registration would be required.
IO4a	Split Payment of VAT	Transactional	This IO consists of the payment of the VAT directly to the tax authority amount when paying the supplier invoice.
IO5	Split Payment Sales List / Purchase List	Monthly	Transactions that are subject to split payment must be recorded in a sales / purchase list and submitted to the tax authorities every month.

Source: Deloitte analysis

As mentioned above in the General Assumptions, for the purposes of the assessment, the number of public bodies across the EU is divided by Member State size.

It is understood that public bodies would have different levels of activity depending on their size and responsibilities. This would generally affect the number of invoices they receive and thus how many split payment transactions they have to make. However, because of the assumptions already applied to public bodies (i.e. the number of public bodies in “small”, “medium” and “large” Member States) it would be unreasonable to adopt another set of assumptions on top of this. We therefore present the costs for only one “typical” public body for the relevant policy options.

C.11 Option 4 - Option 3 with extension of split payment to credit card and cash payments

Option 4 builds on Option 3 and extends split payment to credit card and cash payments. The impacts on the assumptions for the IOs are presented below.

C.11.1 Number of transactions treated as cash

In Option 4, it is assumed that split payment is not applied to cash payments or credit cards used in-store. Credit-cards that are used remotely (to buy online for example) are practically treated as EFT payments in the split payment mechanism. Data on the number of transactions that are completed by in-store cash or credit card payments is not available. Based on interviews and expert assessment, it is assumed therefore that in B2B transactions 98% are completed through EFT or remote credit card payments with just 2% being conducting in-store through cash or credit card.

C.11.2 Time spent on IO5 Spit Payment Sales and Purchase List

The split payment sales and purchase list will have to take into account the applicability of split payment to B2G and B2C transactions, meaning that the sales and purchase list is likely to get longer and therefore more costly. The table below presents the assumptions for the time that would be spent on the split payment sales and purchase list.

Table 82: Option 4 - assumptions on the time spent on IO5 Split Payment Sales & Purchase List

Business turnover category	Time for Sales and Purchase List	Additional time compared to option 3
less than 5 000	50 minutes	+10 minutes
from 5 000 to 50 000	80 minutes	+10 minutes
from 50 000 to 100 000	120 minutes	+10 minutes
from 100 000 to 500 000	170 minutes	+10 minutes
from 500 000 to 2 000 000	220 minutes	+10 minutes
More than 2 000 000	350 minutes	+10 minutes

Source: Deloitte analysis

C.11.3 Time spent on IO3 VAT Return

With the increase in the number of transactions that are subject to split payment, the time taken for a business to complete its periodic VAT return will also increase. The additional time to be spent on the VAT return due to the higher volume of split payment transactions is assumed for each turnover bracket as follows:

Table 83: Option 3 - assumptions on additional time spent on IO3 VAT Return

Business annual turnover	**Additional time spent on VAT return compared to Option 3**
Less than EUR 5 000	+10 minutes
EUR 5 000 to 50 000	+20 minutes
EUR 50 000 to 100 000	+30 minutes
EUR 100 000 to 500 000	+40 minutes
EUR 500 000 to 2 000 000	+50 minutes
More than EUR 2 000 000	+60 minutes

Source: Deloitte analysis

C.12 Assumptions under the Definitive Regime Options 5-6

The second group of policy options is based on the definitive VAT regime, as described in section 6 of the Main body of the Report. Specific assumptions are required for the following data points in the definitive regime:

- Share of businesses becoming ‘certified taxable persons’;

- Share of public bodies becoming 'certified taxable persons';
- Number of cross-border transactions with non-certified taxable persons.

C.12.1 Share of businesses becoming 'certified taxable persons'

The assumption for the percentage of certified businesses has been provided by the Commission. It has been agreed that the percentage of certified businesses across the EU is assumed to be between 70-95%.

The scenarios chosen (70 and 95%) are taken as an example to illustrate what could be the order of magnitude of the cash-flow impact. As such this can in no way be taken as an indication as to what the percentage would be under the forthcoming proposals on the definitive regime.

In addition, an assumption is needed regarding how this relates to the relevant revenues. As there is no data related to this assumption, a 1:1 ratio is assumed.

C.12.2 Share of public bodies becoming 'certified taxable persons'

The assumption for the percentage of public bodies has been provided by the Commission. It has been agreed that 0% public bodies would become certified taxable persons under the definitive regime.

C.12.3 Number of cross-border B2B transactions

There is currently no data on the percentage of B2B transactions that are cross-border. A set of assumptions is therefore used for the number of cross-border transactions per business in each turnover category, corresponding to 10% of domestic transaction figures:

Table 84: Definitive Regime – assumptions on the number of cross-border B2B sales

Turnover bracket	Domestic B2B Sales	Cross-border B2B sales (10%)
less than 5 000	30	3
from 5 000 to 50 000	100	10
from 50 000 to 100 000	200	20
from 100 000 to 500 000	550	55
from 500 000 to 2 000 000	1000	100
More than 2 000 000	2000	200

Source: Deloitte analysis

C.12.4 Number of cross-border B2G transactions (Options 6 and 7)

There is currently no data on the percentage of B2G transactions that are cross-border. A set of assumptions is therefore used for the number of cross-border transactions per business in each turnover category, corresponding in volume to 3% of domestic B2G transaction figures:

Figure 69: Definitive Regime – assumptions on the number of cross-border B2G sales

Turnover bracket	Domestic B2G Sales	Cross-border B2G sales (3%)
less than 5 000	5	0.15
from 5 000 to 50 000	16	0.48
from 50 000 to 100 000	50	1.5
from 100 000 to 500 000	90	2.7
from 500 000 to 2 000 000	180	5.4
More than 2 000 000	300	9

Source: Deloitte analysis

C.12.5 Public Body costs

Under the definitive regime options, public bodies are considered as non-certified taxable persons for the purpose of calculations. As explained in the main body of the report, it is assumed that public bodies do not have any cross-border transactions and therefore there are no additional costs to public bodies under the definitive regime options compared to those in Options 3 and 4.

Annex D - Detailed calculations on the administrative burden

This annex presents the detailed overview of the estimation of the administrative burden for individual businesses under the baseline and Option 1.

The overall administrative burden for the baseline (and all policy options) was estimated using a weighted average of the administrative costs for businesses per each of the six turnover brackets under the different policy options. The tables presented in this annex detail the assumptions and parameters for each turnover bracket and policy option. Tis also demonstrates how the underlying caluclations for the options were conducted for the other options.

An overview table of the administrative costs for businesses in each turnover category for each option are then presented (Table 97) as well as the overall administartive costs to all buisnesses in the EU (

Table 98).

D.1 Option 0 - Baseline

Table 85: Baseline SCM: Business Annual Turnover Category - Less than EUR 5 000 (EUR)

IO#	Administrative task		Tariff	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL for one business
IO1	VAT registration	IN-HOUSE	32,1	504	269,64	26,96		0,1	0,00	**27**
		OUTSOURCE	32,1	0		0,00	250,00	0,1	25,00	**25**
		TOTAL	32,1	0	269,64	0,00	250,00		25,00	**52**
IO2	Invoicing (domestic) (purchase invoices)	IN-HOUSE	32,1	5	2,68	80,25		30	0,00	**80**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	196	104,86	104,86		1	0,00	**105**
		OUTSOURCE	32,1	0	0,00	0,00	250,00	1	250,00	**250**
		TOTAL	32,1	0	104,86	0,00	250,00		250,00	**355**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	2,68		1	0,00	**3**
								Total for one business		**490**

Source: Deloitte analysis based on desk research and interviews with businesses

Table 86: Baseline SCM: Business Annual Turnover Category –From EUR 5 000 to EUR 50 000 (EUR)

IO#	Administrative task		Tariff	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL for one business
IO1	VAT registration	IN-HOUSE	32,1	504	269,64	26,96		0,1	0,00	**27**
		OUTSOURCE	32,1	0		0,00	500,00	0,1	50,00	**50**
		TOTAL	32,1	0	269,64	0,00	500,00		50,00	**77**
IO2	Invoicing (domestic) (purchase invoices)	IN-HOUSE	32,1	5	2,68	267,50		100	0,00	**268**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	196	104,86	209,72		2	0,00	**210**
		OUTSOURCE	32,1			0,00	300,00	2	600,00	**600**
		TOTAL	32,1		104,86	0,00	300,00		600,00	**810**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	5,35		2	0,00	**5**
								Total for one business		**1160**

Source: Deloitte analysis based on desk research and interviews with businesses

Table 87: Baseline SCM: Business Annual Turnover Category –From EUR 50 000 to EUR 100 000 (EUR)

IO#	Administrative task		Tariff	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL for one business
IO1	VAT registration	IN-HOUSE	32,1	504	269,64	26,96		0,1	0,00	**27**
		OUTSOURCE	32,1	0		0,00	500,00	0,1	50,00	**50**
		TOTAL	32,1	0	269,64	0,00	500,00		50,00	**77**
IO2	Invoicing (domestic) (purchase invoices)	IN-HOUSE	32,1	5	2,68	535,00		200	0,00	**535**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	196	104,86	419,44		4	0,00	**419**
		OUTSOURCE	32,1			0,00	350,00	4	1400,00	**1400**
		TOTAL	32,1		104,86	0,00	350,00		1400,00	**1819**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	10,70		4	0,00	**11**
								Total for one business		**2 442**

Source: Deloitte analysis based on desk research and interviews with businesses

Table 88: Baseline SCM: Business Annual Turnover Category –From EUR 100 000 to EUR 500 000 (EUR)

IO#	Administrative task		Tariff	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL for one business
IO1	VAT registration	IN-HOUSE	32,1	645	345,08	34,51		0,1	0,00	**35**
		OUTSOURCE	32,1	0		0,00	1000,00	0,1	100,00	**100**
		TOTAL	32,1	0	345,08	0,00	1000,00		100,00	**135**
IO2	Invoicing (domestic) (purchase invoices)	IN-HOUSE	32,1	5	2,68	1471,25		550	0,00	**1471**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	260	139,10	556,40		4	0,00	**556**
		OUTSOURCE	32,1			0,00	500,00	4	2000,00	**2000**
		TOTAL	32,1		139,10	0,00	500,00		2000,00	**2556**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	10,70		4	0,00	**11**
								Total for one business		**4 173**

Source: Deloitte analysis based on desk research and interviews with businesses

Table 89: Baseline SCM: Business Annual Turnover Category –From EUR 500 000 to EUR 2 000 000 (EUR)

IO#	Administrative task		Tariff	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL for one business
IO1	VAT registration	IN-HOUSE	32,1	890	476,15	47,62		0,1	0,00	**48**
		OUTSOURCE	32,1	0		0,00	1000,00	0,1	100,00	**100**
		TOTAL	32,1	0	476,15	0,00	1000,00		100,00	**148**
IO2	Invoicing (domestic) (purchase invoices)	IN-HOUSE	32,1	5	2,68	2675,00		1000	0,00	**2675**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	370	197,95	1187,70		6	0,00	**1188**
		OUTSOURCE	32,1			0,00	400,00	6	2400,00	**2400**
		TOTAL	32,1		197,95	0,00	400,00		2400,00	**3588**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	16,05		6	0,00	**16**
								Total for one business		**6 426**

Source: Deloitte analysis based on desk research and interviews with businesses

Table 90: Baseline SCM: Business Annual Turnover Category –More than EUR 2 000 000 (EUR)

IO#	Administrative task		Tariff	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL for one business
IO1	VAT registration	IN-HOUSE	32,1	1140	609,90	60,99		0,1	0,00	**61**
		OUTSOURCE	32,1	0		0,00	2000,00	0,1	200,00	**200**
		TOTAL	32,1	0	609,90	0,00	2000,00		200,00	**261**
IO2	Invoicing (domestic) (purchase invoices)	IN-HOUSE	32,1	5	2,68	5350,00		2000	0,00	**5350**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	500	267,50	3210,00		12	0,00	**3210**
		OUTSOURCE	32,1			0,00	500,00	12	6000,00	**6000**
		TOTAL	32,1		267,50	0,00	500,00		6000,00	**9210**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	32,10		12	0,00	**32**
								Total for one business		**14 853**

Source: Deloitte analysis based on desk research and interviews with businesses

D.2 Option 1 - Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)

Table 91: Option 1 SCM: Business Annual Turnover Category - Less than EUR 5 000 (EUR)

IO#	Administrative task		Tariff (national)	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL
IO1	VAT registration	IN-HOUSE	32,1	504	269,64	26,96		0,1	0,00	**27**
		OUTSOURCE	32,1			0,00	250,00	0,1	25,00	**25**
		TOTAL	32,1		269,64	0,00	250,00		25,00	**52**
IO2	Invoicing (domestic) (purchases)	IN-HOUSE	32,1	5	2,68	80,25		30	0,00	**80**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	230	123,05	123,05		1	0,00	**123**
		OUTSOURCE	32,1			0,00	250,00	1	250,00	**250**
		TOTAL	32,1		123,05	0,00	250,00		250,00	**373**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	2,68		1	0,00	**3**
IO4a	Split Payment of VAT	IN-HOUSE	32,1	2	1,07	28,89		27	0,00	**29**
IO5	Split Payment Sales & Purchase List	IN-HOUSE	32,1	30	16,05	192,60		12	0,00	**193**
								Total for one business		**729**

Source: Deloitte analysis based on desk research and interviews with businesses

Table 92: Option 1 SCM: Business Annual Turnover Category –From EUR 5 000 to EUR 50 000 (EUR)

IO#	Administrative task		Tariff (national)	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL
IO1	VAT registration	IN-HOUSE	32,1	504	269,64	26,96		0,1	0,00	**27**
		OUTSOURCE	32,1			0,00	500,00	0,1	50,00	**50**
		TOTAL	32,1		269,64	0,00	500,00		50,00	**77**
IO2	Invoicing (domestic) (purchases)	IN-HOUSE	32,1	5	2,68	267,50		100	0,00	**268**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	230	123,05	246,10		2	0,00	**246**
		OUTSOURCE	32,1			0,00	300,00	2	600,00	**600**
		TOTAL	32,1		123,05	0,00	300,00		600,00	**846**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	5,35		2	0,00	**5**
IO4a	Split Payment of VAT	IN-HOUSE	32,1	2	1,07	96,30		90	0,00	**96**
IO5	Split Payment Sales & Purchase List	IN-HOUSE	32,1	50	26,75	321,00		12	0,00	**321**
								Total for one business		**1 613**

Source: Deloitte analysis based on desk research and interviews with businesses

Table 93: Option 1 SCM: Business Annual Turnover Category –From EUR 50 000 to EUR 100 000 (EUR)

IO#	Administrative task		Tariff (national)	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL
IO1	VAT registration	IN-HOUSE	32,1	504	269,64	26,96		0,1	0,00	**27**
		OUTSOURCE	32,1			0,00	500,00	0,1	50,00	**50**
		TOTAL	32,1		269,64	0,00	500,00		50,00	**77**
IO2	Invoicing (domestic) (purchases)	IN-HOUSE	32,1	5	2,68	535,00		200	0,00	**535**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	250	133,75	535,00		4	0,00	**535**
		OUTSOURCE	32,1			0,00	300,00	4	1200,00	**1200**
		TOTAL	32,1		133,75	0,00	300,00		1200,00	**1735**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	10,70		4	0,00	**11**
IO4a	Split Payment of VAT	IN-HOUSE	32,1	2	1,07	192,60		180	0,00	**193**
IO5	Split Payment Sales & Purchase List	IN-HOUSE	32,1	80	42,80	513,60		12	0,00	**514**
								Total for one business		**3 064**

Source: Deloitte analysis based on desk research and interviews with businesses

Table 94: Option 1 SCM: Business Annual Turnover Category –From EUR 100 000 to EUR 500 000 (EUR)

IO#	Administrative task		Tariff (national)	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL
IO1	VAT registration	IN-HOUSE	32,1	645	345,08	34,51		0,1	0,00	**35**
		OUTSOURCE	32,1			0,00	1000,00	0,1	100,00	**100**
		TOTAL	32,1		345,08	0,00	1000,00		100,00	**135**
IO2	Invoicing (domestic) (purchases)	IN-HOUSE	32,1	5	2,68	1471,25		550	0,00	**1471**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	290	155,15	620,60		4	0,00	**621**
		OUTSOURCE	32,1			0,00	500,00	4	2000,00	**2000**
		TOTAL	32,1		155,15	0,00	500,00		2000,00	**2621**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	10,70		4	0,00	**11**
IO4a	Split Payment of VAT	IN-HOUSE	32,1	2	1,07	529,65		495	0,00	**530**
IO5	Split Payment Sales & Purchase List	IN-HOUSE	32,1	120	64,20	770,40		12	0,00	**770**
								Total for one business		**5 537**

Source: Deloitte analysis based on desk research and interviews with businesses

Table 95: Option 1 SCM: Business Annual Turnover Category –From EUR 500 000 to EUR 2 000 000 (EUR)

IO#	Administrative task		Tariff (national)	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL
IO1	VAT registration	IN-HOUSE	32,1	890	476,15	47,62		0,1	0,00	**48**
		OUTSOURCE	32,1			0,00	1000,00	0,1	100,00	**100**
		TOTAL	32,1		476,15	0,00	1000,00		100,00	**148**
IO2	Invoicing (domestic) (purchases)	IN-HOUSE	32,1	5	2,68	2675,00		1000	0,00	**2675**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	420	224,70	1348,20		6	0,00	**1348**
		OUTSOURCE	32,1			0,00	400,00	6	2400,00	**2400**
		TOTAL	32,1		224,70	0,00	400,00		2400,00	**3748**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	16,05		6	0,00	**16**
IO4a	Split Payment of VAT	IN-HOUSE	32,1	2	1,07	963,00		900	0,00	**963**
IO5	Split Payment Sales & Purchase List	IN-HOUSE	32,1	160	85,60	1027,20		12	0,00	**1027**

Source: Deloitte analysis based on desk research and interviews with businesses

Total for one business	**8 577**

Table 96: Option 1 SCM: Business Annual Turnover Category –More than EUR 2 000 000 (EUR)

IO#	Administrative task		Tariff (national)	Time (minute)	Wage cost	Tot. WAGE costs	External Fees	Frequency (annual)	Other costs	TOTAL
IO1	VAT registration	IN-HOUSE	32,1	1140	609,90	60,99		0,1	0,00	**61**
		OUTSOURCE	32,1			0,00	2000,00	0,1	200,00	**200**
		TOTAL	32,1		609,90	0,00	2000,00		200,00	**261**
IO2	Invoicing (domestic) (purchases)	IN-HOUSE	32,1	5	2,68	5350,00		2000	0,00	**5350**
IO3	VAT Return (domestic)	IN-HOUSE	32,1	560	299,60	3595,20		12	0,00	**3595**
		OUTSOURCE	32,1			0,00	500,00	12	6000,00	**6000**
		TOTAL	32,1		299,60	0,00	500,00		6000,00	**9595**
IO4	VAT payment (domestic)	IN-HOUSE	32,1	5	2,68	32,10		12	0,00	**32**
IO4a	Split Payment of VAT	IN-HOUSE	32,1	2	1,07	1926,00		1800	0,00	**1926**
IO5	Split Payment Sales & Purchase List	IN-HOUSE	32,1	280	149,80	1797,60		12	0,00	**1798**
								Total for one business		**18 962**

Source: Deloitte analysis based on desk research and interviews with businesses

D.3 Overview of administrative costs for businesses in each turnover category

For each turnover category, the costs were calculated through individual tables (as above). The table below presents the administrative costs under each option per business turnover category and the weighted average for the option.

Table 97: Administrative costs for individual businesses in each turnover category

	Business turnover category						Weighted average (EUR)
	less than EUR 5 000	from EUR 5 000 to EUR 50 000	from EUR 50 000 to EUR 100 000	from EUR 100 000 toEUR 500 000	from EUR 500 000 to EUR 2 000 000	More thanEUR 2 000 000	
Baseline (Option 0)	490	1 160	2 442	4 173	6 426	14 853	2 584
Option 1	729	1 613	3 064	5 537	8 577	18 962	3 428
Option 1(b)	740	1 635	3 128	5 623	8 738	19 347	3 487
Option 2	729	1 613	3 064	5 537	8 577	18 962	3 431
Option 3	1 154	2 155	3 861	6 591	10 193	21 573	4 061
Option 4	1 222	2 250	4 009	6 794	10 514	22 215	4 225
Option 5 (scenario 1)	744	1 793	3 402	6 087	9 487	20 717	3 766
Option 5 (scenario 2)	743	1 790	3 397	6 072	9 460	20 663	3 757
Option 6 (scenario 1)	1 094	2 185	3 921	6 756	10 492	22 172	4 153
Option 6 (scenario 2)	1 093	2 182	3 916	6 741	10 466	22 118	4 139
Option 7 (scenario 1)	1 231	2 279	4 066	6 953	10 803	22 792	4 311
Option 7 (scenario 2)	1 230	2 276	4 061	6 938	10 776	22 739	4 303

Source: Deloitte analysis

Table 98: Administrative costs for all businesses in each turnover category

	Business turnover category						Total (EUR billion)
	less than EUR 5 000	fromEUR 5 000 to EUR 50 000	from EUR 50 000 to EUR 100 000	from EUR 100 000 to EUR 500 000	from EUR 500 000 to EUR 2 000 000	More than EUR 2 000 000	
Baseline (Option 0)	3.3 billion	11 billion	9.2 billion	24.2 billion	12.4 billion	14 billion	74.2 billion
Option 1	4.9 billion	15.4 billion	11.6 billion	32.2 billion	16.5 billion	17.9 billion	98.4 billion
Option 1(b)	5 billion	15.6 billion	11.8 billion	32.7 billion	16.8 billion	18.3 billion	100.1 billion
Option 2	4.6 billion	14.9 billion	11.2 billion	31 billion	15.8 billion	17 billion	94.5 billion
Option 3	6.9 billion	19.4 billion	13.5 billion	35.4 billion	17.9 billion	18.8 billion	111.8 billion
Option 4	7.6 billion	20.3 billion	14.1 billion	36.6 billion	18.5 billion	19.3 billion	116.4 billion
Option 5 (scenario 1)	5 billion	17.1 billion	12.9 billion	35.4 billion	18.2 billion	19.5 billion	108.1 billion
Option 5 (scenario 2)	5 billion	17.1 billion	12.8 billion	35.3 billion	18.2 billion	19.5 billion	107.8 billion
Option 6 (scenario 1)	7.2 billion	20.3 billion	14.2 billion	37.7 billion	19.3 billion	20.3 billion	119.2 billion
Option 6 (scenario 2)	7.2 billion	20.3 billion	14.2 billion	37.6 billion	19.2 billion	20.2 billion	118.8 billion
Option 7 (scenario 1)	8.2 billion	21.2 billion	14.8 billion	38.9 billion	19.9 billion	20.9 billion	123.7 billion
Option 7 (scenario 2)	8.1 billion	21.2 billion	14.8 billion	38.8 billion	19.8 billion	20.8 billion	123.5 billion

Source: Deloitte analysis

Annex E - Sensitivity analysis

This annex presents the different sensitivity analysis carried out as part of the studies, around the impacts included on the overall cost-benefit analysis.

E.1 Impact on the VAT Gap

This section provides some sensitivity testing around changes to gross VAT estimates and the potential impact it may have on cash flows. The study estimates of gross VAT revenues have been compared to Tax Authority estimates received through survey responses. The findings are in the following table.

Note: the table below excludes any Member States that have no verified data after inconsistencies were found

Table 99: Gross VAT comparison

Country	Study estimates (EUR billion)	Survey data from Tax Authorities (EUR billion)	Difference (EUR billion)
Belgium	80.8	99.6	-18.8
Bulgaria	14.3	10.5	3.8
Croatia	11.7	6	5.7
Estonia	5.4	9.6	-4.2
France	349.1	629.3	-280.2
Greece	32.2	42.5	-10.3
Hungary	52.8	43.9	8.9
Italy	311.8	461.1	-149.3
Latvia	4.7	11	-6.3
Lithuania	9	2.9	6.1
Malta	4	1.3	2.7
Portugal	31.7	18.5	13.2
Romania	48.6	16.7	31.9
Slovakia	15.5	32.8	-17.3
Slovenia	7.1	16.6	-9.5
Spain	157.1	62.9	94.2
Total	**1135.8**	**1465.2**	**-329.4**

Source: Deloitte analysis

There are some large differences between the studies estimated Gross VAT and data provided by Tax Authorities, in particular in France and Italy that suggest the study underestimates gross VAT revenues by EUR 280.2 billion and EUR 149.3 billion respectively. In contrast the table above suggests there are also some Member States where the study over estimates the country's gross VAT revenues, for example in Spain where the difference is EUR 94.2 billion. Given the large differences highlighted above sensitivity analysis has been conducted to understand the potential impact on the cash flow analysis, and overall cash flow implications to both Businesses and Tax Authorities.

The following tables show the cash flow impacts on both businesses and tax authorities of the Member states above, using both estimates for gross VAT revenues.

Table 100: Gross VAT sensitivity analysis – cash flow implications for businesses

(EUR billions)

	Option 1		Option 2		Option 3		Option 4	
Country	Using study estimates	Using tax authority estimates	Using study estimates	Using tax authority estimates	Using study estimates	Using tax authority estimates	Using study estimates	Using tax authority estimates
Belgium	-0.23	-0.30	-0.23	-0.30	-0.32	-0.41	-0.48	-0.63
Bulgaria	-0.16	-0.11	-0.16	-0.11	-0.21	-0.14	-0.35	-0.24
Croatia	-0.08	-0.04	-0.08	-0.04	-0.11	-0.06	-0.21	-0.11
Estonia	-0.01	-0.02	-0.01	-0.02	-0.01	-0.02	-0.02	-0.04
France	-1.36	-3.05	-1.36	-3.05	-2.08	-4.68	-3.44	-7.95
Greece	-0.68	-1.04	-0.68	-1.04	-1.10	-1.68	-2.01	-3.18
Hungary	-0.27	-0.21	-0.27	-0.21	-0.36	-0.29	-0.55	-0.44
Italy	-4.60	-7.91	-4.60	-7.91	-6.33	-10.88	-10.50	-18.65
Latvia	-0.03	-0.01	-0.03	-0.01	-0.03	-0.01	-0.06	-0.02
Lithuania	-0.02	-0.01	-0.02	-0.01	-0.03	-0.01	-0.07	-0.02
Malta	-0.08	-0.02	-0.08	-0.02	-0.10	-0.03	-0.15	-0.03
Portugal	-0.29	-0.12	-0.29	-0.12	-0.41	-0.17	-0.72	-0.27
Romania	-0.70	-0.16	-0.70	-0.16	-0.89	-0.21	-1.55	-0.32
Slovakia	-0.11	-0.25	-0.11	-0.25	-0.14	-0.32	-0.22	-0.50
Slovenia	-0.04	-0.02	-0.04	-0.02	-0.06	-0.03	-0.10	-0.05
Spain	-0.72	-0.29	-0.72	-0.29	-0.99	-0.40	-1.75	-0.70
Total	**-9.38**	**-13.58**	**-9.38**	**-13.58**	**-13.19**	**-19.34**	**-22.15**	**-33.14**
Difference		***-4.19***		***-4.19***		***-6.16***		***-10.99***

(EUR billions)

Country	Option 5 Using study estimates	Using tax authority estimates	Option 6 Using study estimates	Using tax authority estimates	Option 7 Using study estimates	Using tax authority estimates
Belgium	-0.26	-0.34	-0.35	-0.45	-0.52	-0.68
Bulgaria	-0.19	-0.13	-0.23	-0.16	-0.37	-0.26
Croatia	-0.09	-0.05	-0.13	-0.06	-0.22	-0.11
Estonia	-0.01	-0.02	-0.02	-0.02	-0.03	-0.04
France	-1.55	-3.48	-2.27	-5.11	-3.68	-8.43
Greece	-0.77	-1.19	-1.19	-1.83	-2.16	-3.39
Hungary	-0.30	-0.24	-0.39	-0.32	-0.59	-0.47
Italy	-5.24	-9.02	-6.97	-11.98	-11.39	-20.00
Latvia	-0.03	-0.01	-0.04	-0.01	-0.06	-0.02
Lithuania	-0.03	-0.01	-0.04	-0.01	-0.07	-0.02
Malta	-0.10	-0.03	-0.11	-0.03	-0.16	-0.04
Portugal	-0.33	-0.14	-0.45	-0.19	-0.77	-0.30
Romania	-0.79	-0.19	-0.99	-0.23	-1.66	-0.36
Slovakia	-0.13	-0.29	-0.16	-0.35	-0.24	-0.54
Slovenia	-0.05	-0.03	-0.06	-0.03	-0.10	-0.05
Spain	-0.82	-0.33	-1.09	-0.44	-1.85	-0.74
Total	**-10.69**	**-15.46**	**-14.49**	**-21.23**	**-23.87**	**-35.45**
Difference		***-4.78***		***-6.74***		***-11.58***

Source: Deloitte analysis

Table 101: Gross VAT sensitivity analysis – cash flow implications for tax authorities

(EUR billions)

Country	Option 1 Using study estimates	Option 1 Using tax authority estimates	Option 2 Using study estimates	Option 2 Using tax authority estimates	Option 3 Using study estimates	Option 3 Using tax authority estimates	Option 4 Using study estimates	Option 4 Using tax authority estimates
Belgium	0.08	0.10	0.08	0.10	0.10	0.13	0.16	0.21
Bulgaria	0.10	0.07	0.10	0.07	0.12	0.08	0.20	0.14
Croatia	0.06	0.03	0.06	0.03	0.08	0.04	0.15	0.08
Estonia	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
France	0.92	2.07	0.92	2.07	1.41	3.17	2.33	5.39
Greece	1.06	1.63	1.06	1.63	1.72	2.63	3.13	4.97
Hungary	0.28	0.23	0.28	0.23	0.38	0.30	0.58	0.46
Italy	3.07	5.29	3.07	5.29	4.22	7.26	7.01	12.45
Latvia	0.01	0.00	0.01	0.00	0.02	0.01	0.03	0.01
Lithuania	0.01	0.00	0.01	0.00	0.02	0.01	0.04	0.01
Malta	0.03	0.01	0.03	0.01	0.04	0.01	0.06	0.01
Portugal	0.18	0.08	0.18	0.08	0.26	0.11	0.45	0.17
Romania	0.45	0.11	0.45	0.11	0.58	0.14	1.01	0.21
Slovakia	0.06	0.13	0.06	0.13	0.08	0.17	0.12	0.27
Slovenia	0.03	0.01	0.03	0.01	0.04	0.02	0.06	0.03
Spain	0.51	0.21	0.51	0.21	0.71	0.29	1.25	0.50
Total	**6.86**	**9.96**	**6.86**	**9.96**	**9.78**	**14.38**	**16.58**	**24.92**
Difference		***3.10***		***3.10***		***4.60***		***8.34***
Net impact (business impact - tax authority impact)		**-1.10**		**-1.10**		**-1.56**		**-2.65**

(EUR billions)

Country	Option 5		Option 6		Option 7	
	Using study estimates	Using tax authority estimates	Using study estimates	Using tax authority estimates	Using study estimates	Using tax authority estimates
Belgium	0.09	0.11	0.11	0.15	0.17	0.22
Bulgaria	0.11	0.08	0.13	0.09	0.22	0.15
Croatia	0.06	0.03	0.09	0.05	0.16	0.08
Estonia	0.01	0.01	0.01	0.01	0.01	0.02
France	1.05	2.36	1.54	3.46	2.49	5.71
Greece	1.21	1.85	1.87	2.86	3.38	5.29
Hungary	0.32	0.26	0.41	0.33	0.62	0.50
Italy	3.50	6.02	4.65	8.00	7.60	13.36
Latvia	0.01	0.00	0.02	0.01	0.03	0.01
Lithuania	0.02	0.01	0.02	0.01	0.04	0.01
Malta	0.04	0.01	0.04	0.01	0.06	0.01
Portugal	0.20	0.09	0.28	0.12	0.48	0.19
Romania	0.52	0.12	0.64	0.15	1.08	0.23
Slovakia	0.07	0.15	0.08	0.19	0.13	0.29
Slovenia	0.03	0.02	0.04	0.02	0.07	0.03
Spain	0.59	0.23	0.78	0.31	1.32	0.53
Total	**7.82**	**11.35**	**10.74**	**15.77**	**17.87**	**26.64**
Difference		***3.53***		***5.03***		***8.77***
Net impact (business impact - tax authority impact)		**-1.25**		**-1.71**		**-2.80**

Source: Deloitte analysis

The largest differences are seen at the Member state level, more specifically in Italy and France. Using the tax authority survey data, the estimated financing costs would increase by between EUR 3.31 billion and EUR 8.61 billion for Italy and between EUR 1.70 billion and EUR 4.75 billion for France.

Under policy option 1, the overall impact of using Tax Authority gross VAT estimates compared to the study estimates would result in an increase in financing costs to businesses of EUR 4.19 billion annually. This impact increases further when option 7 is considered, resulting in an increase of EUR 11.58 billion annually.

In contrast, tax authorities see a greater increase in cash flows, with a resulting impact ranging from EUR 3.10 billion under option 1 to EUR 8.77 billion annually under option 7.

The net impact at the aggregate level is therefore ranges from EUR – 1.10 billion to EUR – 2.80 billion annually. Although there are some large differences at the Member State level, when comparing the net impact at the EU level to the other costs and benefits associated with the application of any of the policy options considered, the differences in the cash flow implications are not significant.

E.2 Impact on cash flow – Changes in interest rates

E.2.1 Option 1 – Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)

Cash flow impact for businesses

It is recognised that interest rates can vary over time and by business size. The table below provides some sensitivity analysis around possible increases on the average interest rate within each Member State.

Table 102: Option 1 – EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses)

Change in average interest rates	+0%	+0.5%	+1%	+2%
Overall financing costs (EUR billions)	-16.93	-19.20	-21.49	-26.12
Additional financing costs for Option 1 (EUR billions)	N/A	2.27	7.56	9.49

Source: Deloitte analysis

A 0.5% increase in average interest rates would result in a EUR 2.27 billion increase in financing costs to businesses. In addition, if the average interest rate within each Member State was to increase by 2% the additional financing cost of the negative cash flow impact, as a result of option 1, would increase by EUR 9.19 billion to EUR 26.12 billion. Relatively small changes in interest rates over time could considerably increase the realised cash flow impact on businesses.

Cash flow impact for tax authorities

The following table considers some sensitivity analysis on the total impact at the EU level based on possible increases on the average interest rate within each Member State.

Table 103: Option 1 –EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities)

Change in average interest rates	0%	+0.5%	+1%	+2%
EUR billions	10.79	13.01	15.25	19.78

Source: Deloitte analysis

A 0.5% increase in average interest rates would result in an additional annual benefit of EUR 2.22 billion to tax authorities. In addition, if the average interest rate within each Member State was to increase by 2% the additional benefits would increase further by EUR 8.99 billion to EUR 19.78 billion annually.

E.2.2 Option 2 – Option 1 combined with a generalised reverse charge mechanism in certain Member States

Cash flow impact for businesses

The table below provides some sensitivity analysis regarding possible increases on the average interest rate within each Member State.

Table 104: Option 2 –EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses)

Change in average interest rates	+0%	+0.5%	+1%	+2%
EUR billions	-16.36	-18.51	-20.67	-25.06

Source: Deloitte analysis

The resulting increases in financing costs to businesses range from EUR 2.15 to EUR 8.70 billion annually. An increase in average interest rates of 2% within each Member State is estimated to result in a yearly financing cost so EUR -25.06 billion.

Cash flow impact for tax authorities

The following table considers some sensitivity analysis on the total impact at the EU level based on possible increases on the average interest rate within each Member State.

Table 105: Option 2 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities)

Change in average interest rates	0%	+0.5%	+1%	+2%
EUR billions	10.50	12.61	14.73	19.02

Source: Deloitte analysis

A 0.5% increase in average interest rates would lead in an estimated additional annual benefit of EUR 2.10 billion to tax authorities, compared to EUR 4.22 billion, as a result of a 1% increase. If the average interest rate within each Member State was to increase by 2% the additional benefits would increase further by EUR 8.52 billion to EUR 19.02 billion annually.

E.2.3 Option 3 – Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)

Cash flow impact for businesses

Given that average interest rates may vary both by business size and over time the following table considers some sensitivity analysis around possible increases on the average interest rate within each Member State.

Table 106: Option 3 – EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses)

Change in average interest rates	+0%	+0.5%	+1%	+2%
EUR billions	-23.03	-26.08	-29.15	-35.37

Source: Deloitte analysis

The resulting increase in yearly financing costs due to a 0.5% increase in average interest rates is EUR 3.05 billion to affected businesses. In addition if the average interest rate within each Member State increased by 2% the additional financing cost of the negative cash flow impact, as a result of option 3, would increase by EUR 12.34 billion to EUR - 35.37 billion. As the scope of the policy option increases, small changes in interest rates over time have a large aggregate impact on the cash flow of businesses.

Cash flow impact for tax authorities

The following table considers some sensitivity analysis on the total impact at the EU level based on possible increases on the average interest rate within each Member State.

Table 107: Option 3 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities)

Change in average interest rates	0%	+0.5%	+1%	+2%
EUR billions	14.87	17.85	20.86	26.95

Source: Deloitte analysis

A 0.5% increase in average interest rates would lead in an estimated additional annual benefit of EUR 2.98 billion to tax authorities. In addition, if the average interest rate within each Member State was to increase by 2% the additional benefits would increase further by EUR 12.08 billion to EUR 26.95 billion annually

E.2.4 Option 4 – Option 3 with extension of split payment to credit card and cash payments

Cash flow impact for businesses

As discussed previously, average interest rates may vary both by business size and over time. The following table provides estimates around possible changes to the average interest rate.

Table 108: Option 4 – EU-28 sensitivity analysis on interest rate (impact on ash flow for businesses))

Change in average interest rates	+0%	+0.5%	+1%	+2%
EUR billions	-39.03	-44.20	-49.38	-59.88

Source: Deloitte analysis

A 0.5% increase in interest rates would result in a EUR 5.17 billion increase in financing costs to businesses. The resulting impact of increasing the average interest rate within each Member State by 2% would lead to an increase in annual financing costs by EUR 20.85 billion to EUR – 59.88 billion.

Cash flow impact for tax authorities

The following table considers some sensitivity analysis on the total impact at the EU level based on possible increases on the average interest rate within each Member State.

Table 109: Option 4 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities)

Change in average interest rates	0%	+0.5%	+1%	+2%
EUR billions	25.24	30.29	35.37	45.65

Source: Deloitte analysis

A 0.5% increase in average interest rates would lead in an estimated additional annual benefit of EUR 5.05 billion to tax authorities, compared to EUR 10.13 billion, as a result of a 1% increase. If the average interest rate within each Member State was to increase by 2% the additional benefits would increase further by EUR 20.41 billion to EUR 45.65 billion annually.

E.2.5 Option 5 – Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)

Cash flow impact for businesses

The following table considers some sensitivity analysis on the total impact at the EU level based on possible increases on the average interest rate within each Member State.

Table 110: Option 5 – EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses)

Changes in interest rates	+0%	+0.5%	+1%	+2%
Scenario 1	-19.29	-21.88	-24.48	-29.76
Scenario 2	-17.33	-19.65	-21.99	-26.73

Source: Deloitte analysis

Under scenario 1, a 0.5% increase in interest rates would result in a EUR 2.59 billion increase in financing costs to businesses. In addition if the average interest rate within each Member State increased by 2% the additional financing cost of the negative cash flow impact, would increase by EUR 10.47 billion to EUR – 29.76 billion. Scenario 2 sees a similar impact as a result of increasing the average interest rate however the impact is reduced due to a lower about of VAT being subject to the application of split payment.

Cash flow impact for tax authorities

The following table considers sensitivity analysis on the total impact at the EU level based on possible increases on the average interest rate within each Member State.

Table 111: Option 5 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities)

Changes in interest rates	0%	+0.5%	+1%	+2%
Scenario 1	12.29	14.82	17.37	22.54
Scenario 2	11.04	13.31	15.61	20.24

Source: Deloitte analysis

A 0.5% increase in average interest rates would lead in an estimated additional annual benefit of between of EUR 2.27 billion and EUR 2.53 billion to tax authorities. In addition, if the average interest rate within each Member State was to increase by 2% the additional benefits would increase by up to EUR 10.24 billion to EUR 22.54 billion annually.

E.2.6 Option 6 – Option 5 with extension of split payment on EFT to B2C and B2G

Cash flow impact for businesses

The following table considers some sensitivity analysis on the total impact at the EU level based on possible increases on the average interest rate within each Member State.

Table 112: Option 6 – EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses)

Change in interest rate	0%	+0.5%	+1%	+2%
Scenario 1	-26.16	-29.68	-33.24	-40.43
Scenario 2	-24.19	-27.46	-30.75	-37.41

Source: Deloitte analysis

Under scenario 1, a 0.5% increase in interest rates would result in a EUR 3.52 billion increase in financing costs to businesses. However, under scenario 2 this impact is reduced to EUR 3.27 billion. An increase in average interest rate within each Member State of 2% would result in an additional financing cost of EUR 14.28 billion under scenario 1 and EUR 13.21 billion under scenario 2.

Cash flow impact for tax authorities

The table below considers sensitivity analysis on the total impact at the EU level based on possible increases on the average interest rate within each Member State.

Table 113: Option 6 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities)

Change in interest rate	0%	+0.5%	+1%	+2%
Scenario 1 (EUR billions)	16.76	20.21	23.69	30.74
Scenario 2 (EUR billions)	15.51	18.70	21.92	28.44

Source: Deloitte analysis

A 0.5% increase in average interest rates is estimated to result in an annual benefit of between of EUR 18.70 billion and EUR 20.21 billion to tax authorities. In addition, if the average interest rate within each Member State was to increase by 2% the additional benefits would increase up to EUR 30.74 billion annually.

E.2.7 Option 7 – Option 6 with extension of split payment to credit card and cash payments

Cash flow impact for businesses

The following table considers some sensitivity analysis around possible increases on the average interest rate within each Member State.

Table 114: Option 7 – EU-28 sensitivity analysis on interest rates (impact on cash flow for businesses)

	+0%	+0.5%	+1%	+2%
Scenario 1	-43.05	-48.83	-54.46	-66.43
Scenario 2	-40.70	-46.17	-51.67	-62.82

Source: Deloitte analysis

Under scenario 1, a 0.5% increase in average interest rates across the EU would result in a EUR 5.78 billion increase in financing costs to businesses. Additionally if the average interest rate within each Member State increased by 2% the additional financing cost of the negative cash flow impact, would increase by EUR 23.38 billion to EUR – 66.43 billion. Increasing the number of CTP from 70% to 95%, under scenario 2, results in a reduction in the impact of increasing interest rates. Under scenario 2 a 0.5% increase in the average interest rates is estimated to lead to a marginally smaller increase of EUR 5.47 billion, when compared to scenario 1. Similarly, a 2% increase in interest rates across the EU is estimated to result in a EUR 22.12 billion in additional financing costs, compared to EUR 23.38 under scenario 1.

Cash flow impact for tax authorities

The table below considers sensitivity analysis on the total impact at the EU level based on possible increases on the average interest rate within each Member State.

Table 115: Option 7 – EU-28 sensitivity analysis on interest rates (impact on cash flow for tax authorities)

Change in interest rates	0%	+0.5%	+1%	+2%
Scenario 1	27.70	33.36	39.06	50.60
Scenario 2	26.15	31.50	36.90	47.81

Source: Deloitte analysis

A 0.5% increase in average interest rates is estimated to result in additional benefits of up to EUR 5.66 billion to tax authorities annually. In addition, if the average interest rate within each Member State was to increase by 2% the additional benefits would increase by between EUR 21.66 billion and EUR 22.89 billion annually leading to an estimated total yearly benefit to tax authorities of between EUR 47.81 billion and EUR 50.60 billion.

E.3 Impact on administrative burden

This section provides some sensitivity testing around changes in the volumes of invoices and transactions subject to split payment for businesses and public bodies. As mentioned in the methodology, it is recognised that the number of invoices and transactions per business depends on the industry and size of business. It is therefore important to conduct some sensitivity analysis around possible increases and decrease on the number of invoices processed and transactions completed per business to understand the effect on the overall costs for businesses.

E.3.1 Option 0 – Baseline

Sensitivity analysis for the baseline scenario is provided in the table below.

Table 116: Option 1 – Sensitivity analysis on number of transactions (Baseline scenario)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	517	647	776
	-20%		20%
Individual business cost	EUR 2 421	EUR 2 584	EUR 2 753
	-6%		6%
Cost for all businesses	EUR 69.4 billion7	EUR 74.2 billion	EUR 79 billion
	-6%		6%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of transactions by 20% results in an increase of 6% in individual business costs and costs for all businesses in the EU.

E.3.2 Option 1 – Current VAT regime with split payment applying to electronic fund transfers (EFT) between taxable persons (B2B)

Sensitivity analysis for Option 1 on the number of transactions per business is provided in the table below. The number of transactions affects both the volume of invoices and the number of split payment transactions conducted.

Table 117: Sensitivity analysis on number of transactions for businesses (Option 1)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	517	647	776
	-20%		20%
No. of split payment transactions	466	582	698
	-20%		20%
Individual business cost	EUR 3 205	EUR 3 428	EUR 3 654
	-7%		7%

	Low volume scenario	Standard Scenario	High volume scenario
Cost for all businesses	EUR 91.9 billion	EUR 98.4 billion	EUR 104.9 billion
	-7%		7%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of transactions by 20% results in an increase of 7% in individual business costs and costs for all businesses in the EU compared to the standard scenario.

E.3.3 Option 2 – Option 1 combined with a generalised reverse charge mechanism in certain Member States

Sensitivity analysis for Option 2 on the number of transactions per business is provided in the table below. The number of transactions affects both the volume of invoices and the number of split payment transactions conducted.

Table 118: Sensitivity analysis on number of transactions for businesses (Option 2)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	517	647	776
	-20%		20%
No. of split payment transactions	466	582	698
	-20%		20%
Individual business cost	EUR 3 205	EUR 3 431	EUR 3 618
	-7%		5%
Cost for all businesses	EUR 88.3 billion	EUR 94.5 billion	EUR 99.7 billion
	-7%		5%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of invoices by 20% results in an increase of 5% in individual business costs and for all businesses in the EU compared to the standard scenario. When transactions are reduced by 20%, the costs are reduced for both the individual business and all businesses by 7%.

E.3.4 Option 3 – Option 2 with extension of split payment on EFT between taxable persons and final consumers (B2C) and taxable persons and public bodies (B2G)

Sensitivity analysis for Option 3 on the number of transactions per business is provided in the table below. The number of transactions affects both the volume of invoices and the number of split payment transactions conducted.

Table 119: Sensitivity analysis on number of transactions for businesses (Option 3)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	603	754	904
	-20%		20%
No. of split payment transactions	861	999	1137
	-14%		14%
Individual business cost	EUR 3 829	EUR 4 016	EUR 4 305
	-6%		6%
Cost for all businesses	EUR 105.3 billion	EUR 111.8 billion	EUR 118.3 billion
	-6%		6%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of transactions by 20% results in an increase of 6% in individual business costs and costs for all businesses in the EU compared to the standard scenario. When transactions are reduced by 20%, the costs are reduced for both the individual business and all businesses by 6% respectively.

Number of transactions for public bodies

Sensitivity analysis for Option 3 on the number of transactions subject to split payment by public bodies is provided in the table below.

Table 120: Sensitivity analysis on number of transactions for public bodies (Option 3)

	Low volume scenario	Standard Scenario	High volume scenario
No. of split payment transactions	4000	5000	6000
	-20%		20%
Individual public body cost	EUR 5 270	EUR 6 340	EUR 7 410
	-17%		17%
Cost for all public bodies	EUR 498.5 billion	EUR 599.8 billion	EUR 701 billion
	-17%		17%

Source: Deloitte analysis

Results show that an increase in the number of transactions by 20% results in an increase of 17% in both individual public body costs and costs for all public bodies in the EU compared to the standard scenario.

E.3.5 Option 4 – Option 3 with extension of split payment to credit card and cash payments

Sensitivity analysis for Option 4 on the number of transactions per business is provided in the table below. The number of transactions affects both the volume of invoices and the number of split payment transactions conducted.

Table 121: Sensitivity analysis on number of transactions for businesses (Option 4)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	603	754	904
	-20%		20%
No. of split payment transactions	858	1057	1132
	-19%		7%
Individual business cost	EUR 3 958	EUR 4 225	EUR 4 387
	-6%		4%
Cost for all businesses	EUR 109 billion	EUR 116.4 billion	EUR 120.8 billion
	-6%		4%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of transactions by 20% results in an increase of 4% in individual business costs and costs for all businesses in the EU compared to the standard scenario. When the number of transactions is reduced by 20%, the individual business costs and costs for all businesses are 6% lower.

Number of transactions for public bodies

Sensitivity analysis for public bodies is the same as in Option 3. See Table 120 above.

E.3.6 Option 5 – Definitive VAT regime with split payment applying to EFT between taxable persons (B2B)

As explained in the annex on the methodology for assessing the administrative burden (Annex C), it has been agreed that the percentage of certified businesses across the EU is assumed to be between 70-95%. Therefore, the administrative burden of Option 5 has been assessed through two scenarios: one where the number of CTPs is 70% and another where the number of CTPs is 95%.

Sensitivities on the number of transactions conducted by businesses in these two scenarios is provided below.

Scenario 1

Table 122: Sensitivity analysis on number of transactions for businesses (Option 5 – Scenario 1)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	569	711	854
	-20%		20%
No. of split payment transactions	481	601	722

	Low volume scenario	Standard Scenario	High volume scenario
	-20%		20%
Individual business cost	EUR 3 521	EUR 3 766	EUR 4 010
	-6%		6%
Cost for all businesses	EUR 101.1 billion	EUR 108.1 billion	EUR 115.1 billion
	-7%		6%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of transactions by 20% results in an increase of 6% in both individual business costs and costs for all businesses in the EU compared to the standard scenario. When the number of transactions is reduced by 20%, the individual business costs are 6% lower and the cost for all businesses in the EU are 7% lower, compared to the standard scenario.

Scenario 2

Table 123: Sensitivity analysis on number of transactions for businesses (Option 5 – Scenario 2)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	569	711	854
	-20%		20%
No. of split payment transactions	468	585	702
	-20%		20%
Individual business cost	EUR 3 514	EUR 3 757	EUR 4 000
	-6%		6%
Cost for all businesses	EUR 100. 9 billion	EUR 107.8 billion	EUR 114.8 billion
	-6%		6%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of transactions by 20% results in an increase of 6% in both individual business costs and costs for all businesses in the EU compared to the standard scenario. When the number of transactions is reduced by 20%, the individual business costs and the cost for all businesses in the EU are 6% lower, compared to the standard scenario.

E.3.7 Option 6 – Option 5 with extension of split payment on EFT to B2C and B2G

The sensitivity analysis on the number of transactions is also conducted for the two scenarios under Option 6.

Scenario 1

Table 124: Sensitivity analysis on number of transactions for businesses (Option 6 – Scenario 1)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	655	818	982
	-20%		20%
No. of split payment transactions	861	1018	1 137
	-15%		12%
Individual business cost	EUR 3 918	EUR 4 153	EUR 4 390
	-6%		6%
Cost for all businesses	EUR 112.5 billion	EUR 119.2 billion	EUR 126 billion
	-6%		6%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of transactions by 20% results in an increase of 6% in individual business costs and costs for all businesses in the EU compared to the standard scenario. When the number of transactions is reduced by 20%, the individual business costs and costs for all businesses are 6% lower compared to the standard scenario.

Scenario 2

Table 125: Sensitivity analysis on number of transactions for businesses (Option 6 – Scenario 2)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	655	818	982
	-20%		20%
No. of split payment transactions	EUR 861	EUR 1002	EUR 1 137
	-14%		13%
Individual business cost	EUR 3 918	EUR 4 139	EUR 4 390
	-5%		6%
Cost for all businesses	EUR 112. 5 billion6	EUR 118.8 billion	EUR 126 billion
	-5%		6%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of transactions by 20% results in an increase of 6% in individual business costs and costs for all businesses in the EU compared to the standard scenario. When the number of transactions is reduced by 20%, the individual business costs and costs for all businesses are 6% lower compared to the standard scenario.

Number of transactions for public bodies

Sensitivity analysis for public bodies is the same as in Option 3. See Table 120 above.

E.3.8 Option 7 – Option 6 with extension of split payment to credit card and cash payments

The sensitivity analysis on the number of transactions is also conducted for the two scenarios under Option 7.

Scenario 1

Table 126: Sensitivity analysis on number of transactions for businesses (Option 7 – Scenario 1)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	655	818	982
	-20%		20%
No. of split payment transactions	EUR 931	1070	EUR 1 230
	-13%		15%
Individual business cost	EUR 4 091	EUR 4 311	EUR 4 575
	-5%		6%
Cost for all businesses	EUR 117.4 billion 372	EUR 123.7 billion	EUR 131.3 billion
	-5%		6%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of transactions by 20% results in an increase of 6% in individual business costs and costs for all businesses in the EU compared to the standard scenario. When the number of transactions is reduced by 20%, the individual business costs and the costs for all businesses are 5% lower compared to the standard scenario.

Scenario 2

Table 127: Sensitivity analysis on number of transactions for businesses (Option 7 – Scenario 2)

	Low volume scenario	Standard Scenario	High volume scenario
No. of Invoices	655	818	982
	-20%		20%

	Low volume scenario	Standard Scenario	High volume scenario
No. of split payment transactions	EUR 912	1054	EUR 1 210
	-14%		15%
Individual business cost	EUR 4 081	EUR 4 303	EUR 4 6565
	-5%		6%
Cost for all businesses	EUR 117.1 billion	EUR 123.5 billion	EUR 131 billion
	-5%		6%

Source: Deloitte analysis
Figures are based on averages across the turnover categories

Results show that an increase in the number of transactions by 20% results in an increase of 6% in individual business costs and costs for all businesses in the EU compared to the standard scenario. When the number of transactions is reduced by 20%, the individual business costs and the costs for all businesses are 5% lower compared to the standard scenario.

Number of transactions for public bodies

Sensitivity analysis for public bodies is the same as in Option 3. See Table 120 above.

Annex F - Data sets to be used for CBA

This annex contains the key data sets used during the cost-benefit analysis.

An estimate of the effective VAT rate in each market is required in order to estimate the gross VAT payments affected under each of the policy options, and hence the impact on government revenues and cash flows.

The effective VAT rate is calculated based on the ratio of total VTTL relative to final consumption, with estimates for each Member State shown below.

Table 128: Effective VAT rates

Country	Effective VAT rate – estimated (2015)
Austria	12%
Belgium	10%
Bulgaria	15%
Croatia	16%
Cyprus	12%
Czech Republic	13%
Denmark	14%
Estonia	14%
Finland	10%
France	9%
Germany	11%
Greece	11%
Hungary	24%
Ireland	11%
Italy	10%
Latvia	10%
Lithuania	15%
Luxembourg	12%
Malta	17%
Netherlands	11%
Poland	10%
Portugal	10%
Romania	16%
Slovakia	8%
Slovenia	10%
Spain	8%
Sweden	12%
United Kingdom	8%
EU 28	**10%**

Source: Tax Authority data, Eurostat estimates

Both gross and net VAT revenues are required for the CBA. Data has been collected from surveys issued to tax authorities in each Member State. The information collected has been reviewed against information provided as part of the Commission's study on the special scheme for small enterprises.

Whilst the Net VAT revenues are comparable and the data will be used for the study, a number of discrepancies between the data sources have been identified for gross VAT revenues. Given the issues Gross VAT revenues within each Member State are therefore estimated by applying the effective VAT rate in each Member State to (total output – [exports + imports]) in each Member State. The Net and Gross VAT revenues to be used for the study are stated below.

Table 129: VAT revenues within the EU

Country	Net VAT Revenue (2015, billion €)	Gross VAT – estimated (2015, billion €)
Austria	26.2	72.3
Belgium	27.4	80.8
Bulgaria	4.4	14.3
Croatia	4.8	11.7
Cyprus	1.5	3.5
Czech Republic	12.2	52.5
Denmark	25.5	63.9
Estonia	1.9	5.4
Finland	16.6	37.0
France	132.9	349.1
Germany	211.6	564.7
Greece	12.9	32.2
Hungary	16.2	52.8
Ireland	12.0	59.9
Italy	101.2	311.8
Latvia	1.9	4.7
Lithuania	2.9	9.0
Luxembourg	2.8	22.2
Malta	0.7	4.0
Netherlands	44.9	141.0
Poland	26.8	87.1
Portugal	13.1	31.7
Romania	12.7	48.6
Slovakia	2.5	15.5
Slovenia	2.5	7.1
Spain	57.9	157.1
Sweden	39.0	94.8
United Kingdom	151.5	340.0
EU-28	**966.4**	**2,674.4**

Source: Tax Authority data, Deloitte estimates

One of the objectives of the proposed split payment mechanism is to reduce the VAT Gap. A combination of data collected via surveys to Member States' tax authorities and the Commission's study on the VAT Gap are used to estimate the VAT Gap in each Member State and the EU. The combined data sets are shown below.

Table 130: VAT Gap within the EU-28

Country	VAT Gap – survey (2014/2015, billion €)	VAT Gap – CASE study (2014, billion €)	VAT Gap – combined methodologies (2014/2015, billion €)
Austria	-	2.9	2.9
Belgium	2.5	2.5	2.5
Bulgaria	-	0.9	0.9
Croatia	-	0.5	0.5
Cyprus	-	-	0.2
Czech Republic	2.2	2.2	2.2
Denmark	-	2.7	2.7
Estonia	0.2	0.2	0.2
Finland	0.9	1.4	0.9
France	-	24.5	24.5
Germany	-	23.5	23.5
Greece	4.9	4.9	4.9
Hungary	-	2.1	2.1
Ireland	-	1.2	1.2
Italy	32.1	36.9	32.1
Latvia	0.0	0.5	0.0
Lithuania	-	1.6	1.6
Luxembourg	-	0.1	0.1
Malta	0.4	0.4	0.4
Netherlands	-	5.0	5.0
Poland	6.5	9.3	6.5
Portugal	-	2.1	2.1
Romania	6.1	7.1	6.1
Slovakia	-	2.1	2.1
Slovenia	0.2	0.3	0.2
Spain	-	6.2	6.2
Sweden	-	0.5	0.5
United Kingdom	18.0	17.8	18.0
EU-27 (CASE estimate)		**159.5**	
EU-28			**150.2**

Source: Tax Authority data, Case study estimates. The VAT Gap in Czech Republic is estimated based on data obtained for the rest of the EU.

Understanding the number of businesses that are likely to be impacted by split payment is necessary in order to estimate the overall impact on compliance costs and the cash flow impact for the average business affected. The number of VAT registered and total businesses within the EU is shown below.

Table 131: Number of businesses in the EU-28

Country	Number of businesses (thousand)	Number of VAT registered businesses (thousand)
Austria	1,049	656
Belgium	853	687
Bulgaria	263	263
Croatia	153	153
Cyprus	86	39
Czech Republic	2,715	506
Denmark	746	476
Estonia	297	84
Finland	927	613
France	5,394	3,424
Germany	2,935	1,835
Greece	2,306	1,428
Hungary	1,084	540
Ireland	428	156
Italy	5,843	5,261
Latvia	367	91
Lithuania	2,028	83
Luxembourg	69	69
Malta	58	41
Netherlands	1,935	1,935
Poland	1,755	1,755
Portugal	1,412	1,412
Romania	1,564	384
Slovakia	876	202
Slovenia	252	101
Spain	5,468	3,450
Sweden	1,015	1,014
United Kingdom	5,401	2,043
EU-28	**47,278**	**28,703**

Source: Tax Authority data, Eurostat estimates

When estimating the cash flow implications of switching to a split payment system for both businesses and tax authorities the average interest rate within each Member State is required.

- **Business cost of borrowing:** The interest rate at which businesses can borrow is informed by the ECB's MFI interest rates for loans to non-financial corporations, data from other central banks and survey responses.
- **Government cost of borrowing:** The interest rate that is applied to tax authorities' cash holdings are sourced from the ECB's interest rate statistics for EU member states. These sovereign bond yields reflect the cost at which Member States can borrow funds.

The interest rates used for each Member State within the EU are shown below.

Table 132: Estimated real cost of borrowing (interest rates)

Country	Estimated real cost of borrowing 2020-2029, business	Estimated real cost of borrowing 2020-2029, government
Austria	2.3%	1.3%
Belgium	1.7%	0.6%
Bulgaria	8.4%	5.0%
Croatia	7.5%	5.5%
Cyprus	8.4%	6.6%
Czech Republic	2.6%	1.2%
Denmark	2.6%	1.5%
Estonia	3.4%	2.0%
Finland	3.0%	1.9%
France	3.0%	2.0%
Germany	3.2%	1.5%
Greece	6.9%	10.6%
Hungary	3.8%	4.0%
Ireland	4.6%	2.8%
Italy	4.6%	3.1%
Latvia	5.0%	2.5%
Lithuania	3.7%	2.3%
Luxembourg	3.2%	2.2%
Malta	4.7%	1.8%
Netherlands	3.4%	2.1%
Poland	5.0%	4.6%
Portugal	5.6%	3.6%
Romania	8.4%	5.6%
Slovakia	5.0%	2.7%
Slovenia	5.2%	3.3%
Spain	4.9%	3.5%
Sweden	1.9%	0.6%
United Kingdom	3.4%	1.6%

Source: ECB

When estimating the cash flow implications of the introduction of a split payment mechanism for the defined policy options, the return and refund frequency within each Member State under the current system also need to be considered.

The VAT return and refund periods used for each Member State within the EU are shown below.

Table 133: VAT return and refund frequency

Country	Return frequency	Refund frequency
Austria	Monthly	Monthly
Belgium	Monthly	Monthly
Bulgaria	Monthly	Monthly
Croatia	Monthly	Monthly
Cyprus	Quarterly	Quarterly
Czech Republic	Monthly	Monthly
Denmark	Monthly	Monthly
Estonia	Monthly	Monthly
Finland	Monthly	Monthly
France	Monthly	Monthly
Germany	Monthly	Monthly
Greece	Monthly	Monthly
Hungary	Monthly	Monthly
Ireland	Quarterly	Quarterly
Italy	Monthly	Quarterly
Latvia	Monthly	Monthly
Lithuania	Monthly	Monthly
Luxembourg	Monthly	Monthly
Malta	Monthly	Monthly
Netherlands	Monthly	Monthly
Poland	Monthly	Monthly
Portugal	Monthly	Monthly
Romania	Monthly	Monthly
Slovakia	Monthly	Monthly
Slovenia	Monthly	Monthly
Spain	Monthly	Monthly
Sweden	Monthly	Monthly
United Kingdom	Quarterly	Quarterly

Source: tax authority survey data, http://www.vatlive.com/country-guides/europe/[213]

[213] Note: where no data was provided/available in the public domain Deloitte estimates based on averages

Annex G - References

This annex lists the sources identified as relevant to the study.

Publications and reports

- Adi Ekshtain and David Wells, “The RTvat technology overview, An overview of the architecture, performance and fraud checking”, 2008
- AT Kearney, European strategy report, 2013: winning the growth challenge in payments
- Carfora A., Marigliani M., Pisani S., Spingola A. (2017) Gli effetti dello split payment sulla compliance IVA, Argomenti di Discussione, Agenzia delle Entrate
- Christian Amand & Kris Boucquez , A New Defence for Victims of EU Missing-Trader Fraud?, INTERNATIONAL VAT MONITOR, july/august 2011.
- Commission 2011 Communication on the Future of VAT;
- Confartigianato, Nota informative N. 38/2016
- ECB Press release, 15th October 2015: ECB payment data: https://www.ecb.europa.eu/press/pdf/pis/pis2014.pdf
- Ecommerce article, 3rd February 2015 : https://ecommercenews.eu/ecommerce-sales-europe-will-increase-18-4-2015/
- European Commission 2010 Green paper on the Future of VAT and the consultation responses;
- European Commission Action Plan on VAT, 7 April 2016;
- European Commission Communication on the Follow up of the Action Plan, 4 October 2017
- European Commission Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final Report, 23 August 2016
- Eurostat: Main National Accounts Tax Aggregates: Value added type taxes (VAT)
- Fabrizio Borselli, Organised VAT fraud: features, magnitude, policy perspectives, Questioni di Economia e Finanza 106, 2011.
- FISCALIS Tax Gap Project Group/EU Commission; The Concept of Tax Gaps, Report on VAT Gap Estimations, March 2016
- Flash Eurobarometer 421, 2015: internationalisation of small and medium sized enterprises
- G4S cash report, 2016: European cash report
- Han Kogels, The European Commission’s Green Paper on VAT, INTERNATIONAL VAT MONITOR, May/June 2011.
- Ine Lejeune & Jeanine Daou & Stein De Maeijer, The European Commission’s Communication on the Future of VAT: A Recipe for Growth? , INTERNATIONAL VAT MONITOR, March/April 2012.

- Kenneth Vyncke, Axel Cordewener & Luc De Broe, Towards a Simpler, More Robust and Efficient VAT System by Levying VAT at EU Level, INTERNATIONAL VAT MONITOR, July/August 2011.
- Konstantin Pashev, Munich Personal RePEc Archive, Fighting VAT Fraud: the Bulgarian experience, 3 June 2006
- PwC (2010) European Commission study on the feasibility of alternative methods for improving and simplifying the collection of VAT;
- PwC, A Guide to VAT/GST/SUT in the Americas, 2015
- Richard Gray & Chris Williams, "RTvat, a real-time solution for improving the EU VAT system, removing intra-EU Carousel fraud and reducing other VAT losses", 2008
- Richard Gray & Chris Williams, "RTvat, a real-time solution for improving the EU Emissions Trading Scheme, removing intra-EU Carousel fraud and reducing other financial vulnerabilities", 5 November 2009
- Richard T Ainsworth, Boryana Madzharova, Boston University School of Law; Real- time collection of the Value-Added Tax: some business and legal implications, 24 October 2012
- Richard T. Ainsworth, Boston University School of Law, VAT Fraud as a policy stimulus – is the US watching? VAT withholding, RTVAT, and the Mittler model, 24 February 2011
- Richard Thompson Ainsworth, Boston University School of Law, Working paper Series, Law ans Economics Working Paper No. 08-10, "MTIC (Carousel) Fraud: Twelve Ways Forward; Two Ways "Preferred" – Has the Technology-based Administrative Solution Been Rejected?", 2008
- The UK Card Association, 2016: UK Card Payments

HOW TO OBTAIN EU PUBLICATIONS

Free publications:

- one copy:
  via EU Bookshop (http://bookshop.europa.eu);

- more than one copy or posters/maps:
  from the European Union's representations (http://ec.europa.eu/represent_en.htm);
  from the delegations in non-EU countries (http://eeas.europa.eu/delegations/index_en.htm);
  by contacting the Europe Direct service (http://europa.eu/europedirect/index_en.htm) or calling 00 800 6 7 8 9 10 11 (freephone number from anywhere in the EU) (*).

  (*)The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

Priced publications:

- via EU Bookshop (http://bookshop.europa.eu).

KP-07-17-146-EN-N

Publications Office