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Study in respect of introducing an optional reverse charge mechanism in the EU VAT Directive

Final Report to the European Commission

20 June 2007

Order no. TAXUD/2007/DE/305

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I   Executive Summary

One of the debated solutions to combat certain types of VAT fraud is the introduction of a general reverse charge mechanism in the VAT system for all invoices with an amount above a certain threshold and issued between businesses. In that respect, the European Commission decided to explore the impact of the introduction of such a general reverse charge VAT system in some Member States whereas other Member States would not introduce such a general reverse charge mechanism. The exploration was performed through face-to-face interviews with a sample of 20 case-study companies in an attempt to answer the following research questions:

- impact of a reverse charge mechanism on the administrative costs (one-time and recurring costs);
- cash flow impact of a reverse charge mechanism;
- impact of the reverse charge mechanism on the competitiveness of companies and the Single Market;
- other qualitative feedback.

The scope of this exploratory research covers two possible hypothetical scenarios of a general reverse charge mechanism. Both scenarios are similar as to the concept of shifting the liability for VAT payment to the customer in specific business-to-business transactions. The scenarios do not correspond to the proposals of Germany or Austria.

In the first scenario, the reverse charge mechanism is applicable to invoices of above EUR 5,000, whereas, in the second scenario, the reverse charge mechanism is subject to a multiple threshold, i.e. for invoices of above EUR 5,000 or for all invoices if the supplier has already invoiced EUR 40,000 to a particular customer during that month. Furthermore, both scenarios differ as to the obligation to file a general purchase and sales listing. In scenario 1, a daily purchase and sales listing should be filed on an invoice level, whereas, in scenario 2, a monthly purchase and sales listing should be filed on a customer level (i.e. including all invoices issued to a particular customer during that month).

The research questions listed above have been answered through face-to-face interviews in 20 case-study companies – both large corporations and Small and Medium Sized (SME) companies of various industries in four Member States. The case-study companies were selected randomly. However, we tried to have a variety of companies that operate in different industries (e.g. service companies, industrial goods, consumer goods), in different positions in the supply chain (manufactures, wholesalers, retailers, etc.) and facing a different customer base (business-to-business and business-to-consumer). Furthermore, the case-study companies have business in one of the following countries: Belgium or the Netherlands (Member States that implemented a general reverse charge mechanism in accordance with article 194 of Directive 2006/112/EC) or

Hungary or the United Kingdom (Member States that have not implemented a general reverse charge mechanism as foreseen in article 194 of directive 2006/112/EC). By performing face-to-face interviews rather than asking companies to simply fill out questionnaires, we were able to challenge and clarify the responses received. Furthermore, we obtained extensive qualitative feedback from the case-study companies.

For assessing the impact of a reverse charge mechanism on the administrative costs (one-time and recurring costs) this research used the principles of the "Standard Cost Model" methodology". This methodology was first developed by the Netherlands and was later proposed by the EU Commission in October 2005 as a common EU methodology for measuring administrative costs of legislation on citizens or businesses[1]. Since then, it has been further elaborated, described and refined by the SCM Network[2].

The results of these interviews are summarised below.

 a)   Impact on Administrative Costs

Introducing a reverse charge mechanism leads to both additional one-time and recurring administrative costs. The results of the cost estimates made by 15 of the case-study companies in our sample are summarised in the table below. Given the small size of our sample, these numbers should not be used for the purpose of estimating the cost to companies in general.

Cost in EUR	One-time Cost in EUR		Recurring Cost in EUR		One-time Cost in % of Turnover		Recurring Cost in % of Turnover	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Small and Medium Sized – 5 observations								
Average	7,345	7,363	4,425	2,163	0.022%	0.022%	0.013%	0.007%
Large – 10 observations								
Average	261,357	299,983	72,472	43,012	0.008%	0.009%	0.002%	0.001 %

It should be noted that 5 of the case-study companies, or 25% of our sample, provided us with data that deviated significantly from that provided by the other case-study companies. It is important to point out that, whilst we have categorised these case-study companies as "outliers", we have no reason to assume that the cost estimates provided by these case-study companies are either overestimated or underestimated. The fact that these case-study companies reported

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[1] EU common methodology for assessing administrative costs imposed by legislation, Operational Manual, Annex 10 to "Impact Assessment Guidelines" of the European Commission SEC(2005)791

[2] The International SCM Manual, measuring and reducing administrative burdens for businesses, October 2005, www.administrative-burdens.com, 63 pages.

administrative costs that were significantly higher or lower than the administrative costs of the other case-study companies is due to particular characteristics of either the industry or the case-study company itself, which we have not found at other case-study companies in our sample and have therefore excluded from the calculation of the averages in the table above.

The interviews revealed that the highest administrative cost (both one-time and recurring costs) relates to the obligation to issue compliant sales invoices. According to the case-study companies interviewed, this is mainly due to the requirement to apply the reverse charge only to transactions exceeding a specified threshold. This is especially the case for the cumulative threshold, defined as part of the second scenario. In order to be able to comply with this obligation (i.e. following up the threshold on an invoice basis), certain case-study companies would need to go through a costly change in their IT system to automate the compliance correctly. This leads to important one-time costs but rather reduced recurring costs. Other case-study companies, however, would increase manual interventions before issuing the invoice in order to verify that the reverse charge mechanism is correctly applied. This leads to limited one-time costs but important recurring costs. From the qualitative feedback during the interviews, we found that the fact that the reverse charge mechanism is not applied to all invoices is the reason for the high level of these administrative costs. The majority of the case-study companies confirmed that, even though most of their invoices are either above or below the thresholds (depending on the case-study company), they would always encounter exceptions. In order to comply with these exceptional situations, significant costs have to be borne.

The highest recurring costs are caused by the obligation to file a general purchase and sales listing electronically, the obligation to issue compliant sales invoices and the obligation to register purchase invoices correctly. The costs are caused by additional effort to register, prepare and verify daily listings and additional controls to ensure compliance of invoices. Case-study companies especially saw a lot of room for errors in the daily listings, due to difficulties of correcting intra-day cut-off and other errors that might arise in the course of business, especially if they were to be used to match with corresponding transactions with suppliers and customers.

The recurring burden appears relatively high for small and medium sized case-study companies because these case-study companies still rely quite heavily on manual processes. Therefore they see a lot of room for errors, and hence a need for either upfront control or time spent on corrections.

 b) Cash flow impact of a reverse charge mechanism

We found that the cash flow impact depends mainly on the business-model of the company and is influenced by the import/export situation of the company as well as payment lead times towards both suppliers and customers. In the sample of case-study companies we investigated, the

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average cash flow impact for small and medium sized case-study companies is negative, while the average impact on the large case-study companies interviewed is positive. From our sample, we were unable to identify the underlying reasons. Some case-study companies informed us that, depending on the negotiating power with their suppliers and customers, a cash flow advantage would be (partially) transferred to the strongest party and a cash flow disadvantage would be (partially) passed through to the weakest party.

c) Impact of the reverse charge mechanism on the competitiveness of a company and the internal market

Most case-study companies do not see an impact on the competitiveness of their business and would not relocate or select suppliers in specific countries depending on the introduction of the reverse charge mechanism. However, a minority of the case-study companies stressed concerns with regard to unfair competition from businesses that do not apply the VAT legislation correctly. One case-study company would consider a possible relocation of its import hub and three case-study companies said the introduction of a general reverse charge mechanism could be a trigger for them to reconsider their European footprint, i.e. their sales structure, operational structure, supply chain, etc.

d) Other qualitative feedback from the interviewed businesses

The 20 case-study companies have given insight in what lives within the companies with respect to the introduction of a reverse charge. The administrative costs of the presented scenarios are a real concern. Case-study companies stressed in particular the difficulties they would encounter with monitoring the threshold for all invoices. The case-study companies also expressed their concern for a lack of uniformity in rules and VAT inspections. By using criteria such as simplicity and uniformity, there are – in the views of the case-study companies – alternative solutions to combat fraud perhaps more effectively than the proposed general reverse charge mechanism. The majority of the case-study companies explicitly mentioned that, if a general reverse charge mechanism were introduced, there is a need for harmonisation of the rules, the compliance model, as well as consistency in VAT inspections.

As to the different scenarios, all case-study companies felt that scenario 2 is more complex than scenario 1, due to the cumulative threshold. Furthermore, the majority of the case study companies were clearly of the opinion that a product based specific reverse charge would increase complexity compared to a general reverse charge mechanism on the basis of a threshold. They stressed a concern that a product definition would be open to interpretation.

Other comments of case-study companies related to negotiations with the tax authorities, motivating and training staff, treatment of credit notes and the usefulness of the additional information provided to the tax authorities.

II   Introduction

1   On 31 May 2006, the European Commission adopted a communication (COM(2006)254) whose aim is to launch a debate with all parties concerned on a European strategy to combat tax fraud. In the framework of this debate, a number of EU Member States have proposed introducing a general reverse charge mechanism as a means to tackle certain types of VAT fraud.

2   As a result, the European Commission decided to explore various impacts of the potential introduction of such a reverse charge mechanism in the VAT legislation throughout the European Union.

3   In that respect, PricewaterhouseCoopers has been engaged to research some of the potential impacts an optional reverse charge mechanism might have. The purpose of this research is not to provide a full scope analysis, but merely to explore some of the different possible impacts of an optional reverse charge mechanism, using a commonly applied methodology.

4   As part of our research, which is exploratory in nature, we assessed the impact of such a change in the VAT system for a **number of aspects** as estimated by established and non-established businesses:

- the impact of a reverse charge mechanism on the administrative costs (one-time and recurring costs);
- the cash flow impact of a reverse charge mechanism;
- the impact of the reverse charge mechanism on the competitiveness of a company and the Single Market;
- other qualitative feedback.

5   The purpose of the exploratory research is to assess the impact of two hypothetical scenarios for possible reverse charge mechanisms. The research is not intended to examine a reverse charge mechanism as proposed by certain Member States such as Germany and Austria. In the next chapter, the characteristics of these hypothetical reverse charge mechanisms are explained in more detail.

III   Reverse Charge

3.1   Scope of the exploratory research

6   The scope of the exploratory research with a number of selected case-study companies consisted in assessing the additional administrative cost for a business if Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax were to provide for an optional general reverse charge mechanism.

7   This assessment should allow the European Commission to determine whether enterprises will or will not be hindered or whether this will provide incentives for enterprises to relocate their business to countries applying or not applying the optional reverse charge mechanism (impact on the Single Market).

8   As presented in the diagram below, we analysed two as is scenarios and two possible future to be scenarios.

9   In each of these scenarios, the exploratory research focused on assessing, for existing established and non-established businesses:
- the impact of a reverse charge mechanism on the administrative costs (one-time and recurring costs);
- the cash flow impact of a reverse charge mechanism;
- the impact of the reverse charge mechanism on the competitiveness of a company and the Single Market;
- other qualitative feedback.

As is Scenarios	To be scenarios	Assessment
"Traditional" VAT system: collection of VAT by the supplier (no application of article 194 of Council Directive 2006/112/EC)	Scenario 1: Reverse charge mechanism with obligation to file a general purchase and sales listing on a daily basis	Administrative cost (one- time and recurring)
		Cash flow impact
Reverse charge for non-established businesses (application of article 194 of Council Directive 2006/112.EC	Scenario 2: Reverse charge mechanism with obligation to file a general purchase and sales listing on a monthly basis	Impact on the Single Market
		Other qualitative feedback
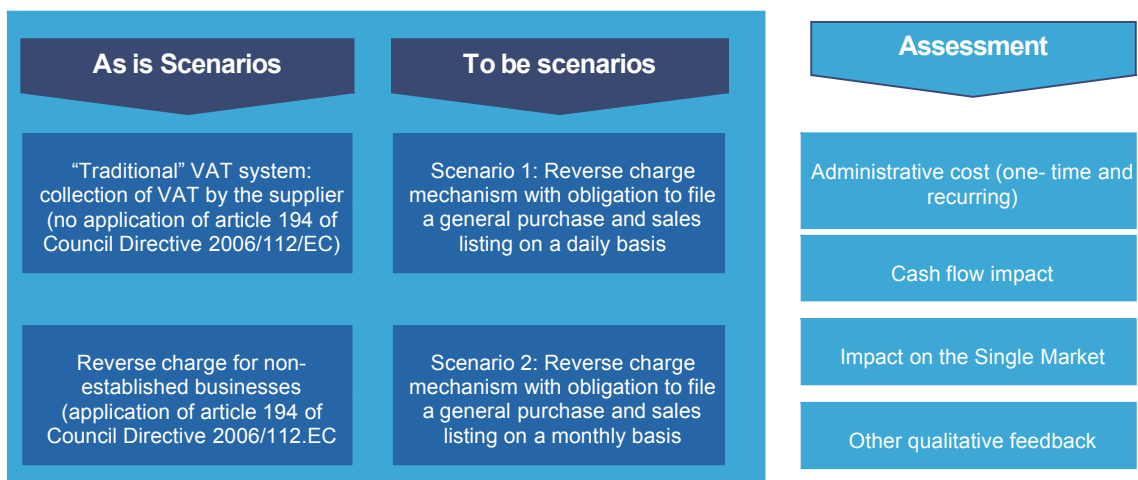
3.2   Description of the to-be scenarios

10 The reverse charge mechanism will be applicable to both established and non-established businesses selling or buying "supplies of goods or services" that take place in a Member State further to articles 31, 32, 36, 37, 38, 39, 43, 44 first paragraph, 45, 46, 47 first paragraph, 50 first paragraph, 52 and 54 first paragraph of Directive 2006/112/EC (hereinafter referred to as "domestic supplies")

11 The general reverse charge mechanism will be optional for Member States.

12 The proposed general reverse charge mechanism is not a replacement of the (optional) reverse charge mechanisms currently provided for in Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax (e.g. reverse charge for non-established businesses as mentioned in article 194 or 196 of the Directive 2006/112/EG).

13 Member States will autonomously determine the precise conditions of the general reverse charge mechanism, such as (non-restrictive list):
- level of the threshold;
- currency of the threshold;
- monthly reporting on a global basis or daily reporting of sale and purchase invoices;
- reporting in the VAT return;
- scope of the reverse charge mechanism.

14 The hypothetical scenarios analysed will have the following characteristics. Under the assumption made in paragraph 13, these characteristics are mainly to be determined by the Member States. However, in order to allow businesses to assess the impact of a general reverse charge mechanism, it is necessary to make some assumptions with regard to the general characteristics of the mechanism.

Scenario 1	Scenario 2
• The reverse charge is applicable for each **invoice exceeding EUR 5,000.**	• The reverse charge is applicable for invoices **exceeding EUR 5,000 or EUR 40,000 per customer** (cumulative total for one month).
• A special **reverse charge VAT number** needs to be used by the company selling or buying goods under a reverse charge regime.	• A special **reverse charge VAT number** needs to be used by the company selling or buying goods under a reverse charge regime.
• A **general purchase and sales listing** must be filed on a **daily basis**, listing **each individual invoice** subject to the reverse charge (VAT number of the supplier, special reverse charge number of the customer, invoice number, invoice date, taxable amount).	• A **general purchase and sales listing** must be filed on a **monthly basis**, identifying the **total amount of sales to each customer** in respect of whom the reverse charge was applied (VAT number of the supplier, special reverse charge number of the customer, total taxable amount for each customer).

15 The relevant thresholds for applying the reverse charge mechanism relate to the total taxable amount mentioned on the invoice and not to the taxable amount of each individual supply.

16 The taxable persons will be obliged to prove that they had verified the validity of the special reverse charge number of their client in order to be entitled to apply the reverse charge mechanism.

17 Only taxable persons with a full right to deduct VAT fall within the scope of the optional reverse charge mechanism.

18 Member States will be free to determine the timing of the introduction of the general reverse charge mechanism as they each deem appropriate.

19 Tax authorities will perform the same level of inspections with taxable persons and pose the same number of queries to them.

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20 Case-study companies will have the possibility to verify the special VAT reverse charge number online on a website provided by the Member State.

IV   Methodology and Approach

4.1   Introduction

21   This exploratory research on the impact of the introduction of a reverse charge mechanism focused on the following aspects as estimated by established or non-established businesses:

- the impact of a reverse charge mechanism on the administrative costs (one-time and recurring costs);
- the cash flow impact of a reverse charge mechanism;
- the impact of the reverse charge mechanism on the competitiveness of a company and the Single Market;
- other qualitative feedback.

22   This research used the principles of the "Standard Cost Model" methodology". This methodology was first developed by the Netherlands and was later proposed by the EU Commission in October 2005 as a common EU methodology for measuring administrative costs of legislation on citizens or businesses[3]. Since then, it has been further elaborated, described and refined by the SCM Network[4].

23   This methodology is described as follows by the SCM Network: *"The Standard Cost Model (SCM) is today the most widely applied methodology for measuring administrative costs. The SCM has been developed to provide a simplified, consistent method for estimating the administrative costs imposed on business by central government. It takes a pragmatic approach to measurement and provides estimates that are consistent across policy areas. The SCM methodology is an activity-based measurement of the businesses' administrative burdens that makes it possible to follow up on the development of the administrative burdens. A key strength of the Standard Cost Model is that it is uses a high degree of detail in the measurement of the administrative costs, in particular going down to the level of individual activities."*

24   As underlined by the EU NET Administrative Cost Model, the data gathered is not used at a macroeconomic level. No extrapolation calculations are performed to assess the global cost of the adoption of a general reverse charge mechanism to the economy.

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[3] EU common methodology for assessing administrative costs imposed by legislation, Operational Manual, Annex 10 to "Impact Assessment Guidelines" of the European Commission SEC(2005)791

[4] The International SCM Manual, measuring and reducing administrative burdens for businesses, October 2005, www.administrative-burdens.com, 63 pages.

4.2 Project Phases

25 The research was performed in three main phases, sub-divided into the 10 project steps described below :

Phase 1 - Preparatory Analysis	
Step 1	Detailed description of the to be VAT policy.
Step 2	Administrative costs: identification of the Information Obligations and Activities. Creation of the template for the collection of cost-parameters.
Step 3	Cash flow model: develop cash flow model and data requirements.
Step 4	Qualitative questions: derive interview questions from qualitative exploratory research questions.
Step 5	Identification of the business segments and businesses to be contacted.
Step 6	Preparation of an interview guide.
Step 7	Piloting.
Phase 2 – Data Capture and Standardisation	
Step 8	Business interviews.
Step 9	Completion and standardisation of data collected.
Phase 3 - Calculation and Reports	
Step 10	Reporting and transfer of data.

4.3 Phase 1 – Preparatory Analysis

4.3.1 Step 1 – Detailed description of the to be VAT policy

26 Assessing the expected impact of the introduction of a reverse charge mechanism required a detailed description of the hypothetical future situation. It was decided to analyse the impact of two possible scenarios as described above in paragraph 14.

4.3.2 Step 2 – Administrative costs: identification of the Information Obligations and Activities - Approach for the gathering of cost-data

4.3.2.1 INFORMATION OBLIGATIONS

27 The SCM provides a way for breaking down a regulation into a range of manageable components of which the costs can be measured. These components are essentially items of information that businesses, as a consequence of the regulation, have to prepare and submit

mainly to government entities. According to the SCM each regulation can be broken down into Information Obligations (IOs).

28 Based on the detailed description of the to be scenarios, existing SCM-research on VAT[5] and PwC research, the scenarios were broken down into eight information obligations:

Ref.	VAT Information Obligation	Abbreviation	As is scenario "Traditional" VAT system (Sample Member States: UK, Hungary)	As is scenario Reverse charge for non-established businesses (Sample Member States: Belgium, The Netherlands)	To be scenario 1	To be scenario 2
1.	Obligation to register for VAT	VAT registration	✓	Depends on the situation	✓	✓
2.	Obligation to obtain a special reverse charge VAT number in order to apply the reverse charge	Reverse Charge number			✓	✓
3.	Obligation to book the invoices in a purchase ledger	Booking purchase invoices	✓	✓	✓	✓
4.	Obligation to issue compliant invoices and obligation to book the invoices in a sales ledger	Issuing/Booking sales invoices	✓	✓	Including the new special reverse charge VAT number of the customer. The supplier is obliged to verify the special reverse charge VAT number of the customer.	Including the new special reverse charge VAT number of the customer. The supplier is obliged to verify the special reverse charge VAT number of the customer.
5.	Obligation to file a general purchase and sales listing electronically	General purchase and sales listing		Yearly sales listing for Belgium	On a daily basis, mentioning for each invoice subject to the reverse charge individually: . VAT number of the supplier . special reverse charge VAT number of the customer . Invoice number . Invoice date . Taxable amount	On a monthly basis, mentioning the total amount of sales to each customer in respect of whom the reverse charge was applied: . VAT number of the supplier . special reverse charge VAT number of the customer . Total taxable amount per customer per month
6.	Obligation to file periodic VAT returns	VAT returns	✓	✓	Including purchases subject to reverse charge	Including purchases subject to reverse charge
7.	Obligation to file quarterly intra-Community sales listings	intra-Community sales listing	✓	✓	✓	✓
8.	Obligation to cooperate with periodic VAT inspections	VAT inspections	✓	✓	✓	✓

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[5] Administrative Burdens - HMRC Measurement Project, March 2006, KPMG, www.hmrc.gov.uk.

4.3.2.2 ACTIVITIES VS. INFORMATION OBLIGATIONS

29 Although the Information Obligation (IO) viewpoint is relevant in policy making and is at the basis of the SCM-methodology, it was decided to conduct the business interview not based on IOs but based on process activities. This viewpoint was judged as being more practical for the case-study companies interviewed.

30 The activities investigated are based on the three business processes impacted by a change in VAT-regulations:

- sales (Order to Cash);
- purchasing (Procure to Pay);
- compliance with VAT obligations.

31 A list of preparatory (one-time) and recurring activities that potentially take place or are impacted in case of the introduction of a reverse charge mechanism, was developed for each business process and re-fined during the pilot interview (see below).

32 We refer to Appendix 3.1 for the list of activities.

33 In order to be able to report costs not only on an activity basis but also on IO-basis, each activity was allocated to an IO. We refer to Appendix 3.2 for the allocation of activities to IOs.

4.3.2.3 COST PARAMETERS

34 Application of SCM involves applying the principles of "Activity-Based-Costing" to determine the additional costs incurred by a "normally efficient business" (i.e. a business that handles its administrative tasks in a normal manner, neither better nor worse than may be reasonably expected) as it fulfils the IO.

35 A distinction is made between "time-based costs" and "acquisition costs".

36 Time-based costs are one-time or recurring costs that relate to time spent by people within the case-study company.

37 Time-based costs are calculated using the time spent, the frequency and the wage rate for each activity.

38 The time and frequency were assessed by the case-study companies. As regards to the wage rate, however, the case-study companies only provided us with the resource type (e.g. accounting staff or finance manager) that would perform the activity. These were allocated during the standardisation step to a limited list of resource-types and their wage level. We refer to Appendix 1 for the resource types and wage rates applied for each country. All wages include 30% overhead[6].

39 Acquisition costs are one-time or recurring external costs that are not related to time spent. Examples include postage for a mailing, external IT-development, etc. These costs are assessed by the case-study companies.

40 Appendix 3.1 shows the cost-data sheet used for each interview. The data sheet shows that time-based and acquisition costs have been assessed for each company and for each activity of the three business processes.

4.3.3 Step 3 – Cash flow model: develop cash flow model and data requirements

41 Introducing the general reverse charge mechanism could also have a potential impact on the cash flow position of case-study companies, in particular on working capital.

42 While cash flow is an accounting term that refers to the amounts of cash being received and spent by a business during a defined period of time, working capital is a financial metric that represents the amount of operating liquidity available/required to run a business. The need for supplementary liquidity leads to additional financing cost and inversely, excess liquidity leads to a saving in financing cost.

43 Introducing a general reverse charge mechanism acts upon the working capital by shifting the VAT amounts (i.e. reduction of VAT being paid to/received from customers, suppliers and the government) and the specific timing when these amounts are due or to be received.

44 In order to be able to quantify the cash flow impact of the introduction of a reverse charge mechanism, a specific calculation model was developed. During the interview all data necessary to compute the cash flow impact was collected under the assumptions of scenario 1 (i.e. daily listing and invoice threshold of EUR 5,000). The input collected from each case-study company in order to calculate the cash flow impact is listed below:

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[6] The Standard Cost Model Manual describes different overhead percentages for specific countries and sectors. The overhead described in the Manual varies between 25% and 50%. For the purpose of this study 30% was applied as recommended for the UK.

- VAT on revenues (to be received from customers):
    - monthly revenue
    - % of revenue impacted by VAT
    - average VAT% applicable to revenue impacted by VAT.
    - % of revenue impacted by reverse charge mechanism (invoices > 5.000 EUR)
    - average terms of payments of clients

- VAT on costs (to be paid to suppliers):
    - monthly costs
    - % of cost impacted by VAT
    - average VAT% applicable to cost impacted by VAT.
    - % of cost impacted by reverse charge mechanism (invoices > 5.000 EUR)
    - average terms of payments to suppliers
- VAT cycle:
    - periodicity of VAT statements (i.e. monthly or quarterly).
    - VAT payment terms (after end of VAT period).
    - VAT recovery terms (after end of VAT period)[7].

45 Based on the above data and using the 1 month EURIBOR rate, the NET cash flow advantage/disadvantage of each case-study company was calculated. We refer to Appendix 3.3 for the input and output model used.

46 The interactions between those parameters define the impact on Working Capital.

4.3.4   Step 4 – Qualitative questions: derive interview questions from qualitative exploratory research questions

47 When assessing administrative costs and the cash flow impact of the introduction of the reverse charge mechanism, the focus was given on collecting data that allows quantitative analysis.

48 Qualitative questions were added to the interview to (1) assess the impact of additional scenarios (specific reverse charge), (2) understand the businesses' point of view on the Single Market impact of the introduction of a reverse charge mechanism and (3) give the case-study companies interviewed the opportunity to express their opinions on the two scenarios.

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[7] The VAT payment and recovery terms used with regard to the VAT return are specific to the case study company. E.g. if a case study company currently has a licence to obtain early refund, this is taken into account in the cash flow calculation.

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49 Although the additional scenarios could have been assessed quantitatively, it was decided not to do so because it would have lengthened the interview-time excessively. The quantitative impact on the Single Market was not assessed. Neither did we assess the impact on administrative costs for the tax authorities or on the budget of the Member States.

50 The following questions were asked to each case-study company during the interview:

- If a specific reverse charge (on specific products, e.g. mobile phones or computer chips) were introduced, would this add less / more complexity than a general reverse charge (on all products)?

- If your country decides to introduce the reverse charge mechanism, whilst other countries do not, how will this affect your competitiveness?

- Considering that certain countries will apply the reverse charge mechanism, whilst other countries will not, how will this affect your decisions in terms of (re-)location of your business entities?

- How will it affect your choice of suppliers?

- Are there any other positive or negative effects of such a reverse charge mechanism that we have not discussed so far?

4.3.5   Step 5 – Identification of the business segments and businesses to be contacted

51 Segmentation of businesses focused on the three parameters "country", "business size" and "business-model relevance". This segmentation was applied assuming that it would create relevant differences in the results.

52 Interviews were undertaken in four Member States: Belgium, Hungary, the Netherlands and the United Kingdom. These Member States were chosen based on their current VAT regime. Two Member States currently apply the "traditional" VAT mechanism, i.e. the optional reverse charge mechanism as provided in article 194 of Council Directive 2006/112/EC is not introduced in the national VAT legislation (UK and Hungary). The two other Member States apply a VAT mechanism with a reverse charge for non-established businesses as provided for in article 194 of Council Directive 2006/112/EC (Belgium and the Netherlands). The reason for this selection is primarily to ensure that we covered case-study companies that have some experience with a semi-general reverse charge mechanism (i.e. if the supplier is not

established in the Member State of the supply) and some case-study companies that have less experience with a semi-general reverse charge mechanism[8].

53 The segmentation on business size split case-study companies into two groups, "Large" and "Small and Medium Sized" (SME) case-study companies. The definition for "Small and Medium Sized" case-study companies was based on the Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises. Enterprises employing fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million are considered as "Small and Medium Sized case-study companies".

54 "Business model relevance" was verified for the case-study companies to be interviewed by assessing if the selected case-study companies dealt with purchase or sales invoices falling under at least one of the following articles: 31, 32, 36, 39, 43, 44 first paragraph, 45, 46, 47 first paragraph, 50 first paragraph, 52 and 54 first paragraph of Directive 2006/112/EC, i.e. the articles of Council Directive 2006/112/EC that would be impacted by the introduction of a possible reverse charge ("domestic supplies").

55 Case-study companies were then contacted by the local project team in the four Member States, based on publicly available information and existing business contacts.

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[8] Although the reverse charge mechanism exists for most intra-Community trade transactions and in many Member States also on particular transactions such as waste, gold, building services, etc.

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56 Interviews were undertaken with the following case-study companies:

Type	Country	Industry	B2B/B2C
Large	BE	Photographic Film, Paper, Plate, and Chemical Manufacturing	B2B
Large	BE	Carpet and Rug Mills	B2B
Large	BE	Primary Smelting and Refining of Copper	B2B
SME	BE	Iron and Steel Mills	B2B
SME	BE	Carpet and Rug Mills	B2B
SME	BE	Institutional Furniture Manufacturing	B2B
Large	HU	Automobile Manufacturing	B2B
Large	HU	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	B2B
Large	HU	Electronic Computer Manufacturing	B2B
Large	HU	Production (food).	B2B
Large	HU	Conglomerate	B2B/B2C
SME	HU	Manufacturing (construction material)	B2B
SME	HU	Motor Vehicle Supplies and New Parts Merchant Wholesalers	B2B
Large	NL	Grocery Stores	B2C
Large	NL	Paint and Coating Manufacturing	B2B
Large	NL	Process, Physical Distribution, and Logistics Consulting Services	B2B
Large	NL	Retail (optical and hearing devices)	B2C
Large	NL	Support Activities for Metal Mining	B2C
Large	UK	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	B2B
SME	UK	Animal (except Poultry) Slaughtering	B2B

4.3.6   Step 6 – Preparation of an interview guide

57 In order to ensure that the face-to-face interviews were performed in a standardised way by the different interviewers of the Project Team, two documents were developed to support the interview process:

- Interview Guidelines, see Appendix 2.1: this document lists all questions asked during the interview process in chronological order. It was used by the interviewer to structure the interview process and collect relevant information and data during the face-to-face interview. This document is an internal document and was not made available to the case-study companies.

- Interview Outline, see Appendix 2.2: this document gives explanatory background information on the study and the interview process and highlights the main questions. In particular, the document shows the process-steps for which the cost-impact is assessed during the interview. The document was sent to the case-study companies before the interview took place to allow them to prepare the most critical information and data upfront. The document was then used during the interview to explain each step of the interview process.

58 The accuracy and completeness of these documents has been tested by a number of experts of PricewaterhouseCoopers in order to assure that we will be able to retrieve the required data from the case-study companies in the most efficient way.

4.3.7   Step 7 – Piloting

59 Before the pilot interview, extensive internal validation with our compliance experts and a short telephone interview with a random company were performed. The pilot interview was then set up based on the above documents and run identically with the other interviews. During the pilot interview, a limited number of shortcomings were corrected in the approach, and the interview guidelines and interview outline documents were adapted.

60 The pilot interview showed that the above preparatory work was robust and that interviews could be performed in approximately 2 to 3 hours. Additionally, the pilot interview revealed that detailed practical assumptions needed to be made as to how the reverse charge would work, in order for the case-study companies to be able to assess all costs. Examples of questions raised during the pilot interview were: "How will the special reverse charge VAT number be obtained?" and "How should credit notes be treated?".

61 Based on the feedback of the piloting case, the interview documents were updated in order to continue with the data capture.

4.4   Phase 2 – Data capture and data standardisation

4.4.1   Step 8 – Business Interviews

62   The business interviews took place with one or two representatives of the project team. All interviews were face-to-face interviews. The core project team was present during all interviews, in most cases accompanied by PwC staff with the required specific language, sector or business process knowledge. Most of the interviews took place at the premises of the company, or at PwC offices if preferred by the case-study company.

63   Based on the interview outline, the case-study company was free to decide who would be present at the interview. In smaller case-study companies this was primarily the Chief Financial Officer (CFO) or equivalent. In larger case-study companies the presence varied between the person responsible for taxation affairs and the executive management from the financial department.

64   In cases where the interviewee was not able to provide all data required, next steps were agreed upon and followed up by phone or e-mail by the project team.

4.4.2   Step 9 - Completion and standardisation of data collected

65   In order to report the findings based on the data collection, all quantitative data were grouped in one data-sheet and standardised in terms of currency and resource costs. In order to determine the cost of time spent on specific tasks, resource profiles indicated during the interview were allocated to standard resource profiles for which country specific published wage-rates were used. An overhead of 30% is included in all wage rates. We refer to Appendix 1 for the wage-costs and exchange rates applied.

66   In parallel missing data was identified and followed up with the case-study companies.

4.5   Phase 3 – Calculation and reports

4.5.1   Step 10 – Reporting and transfer of data

67   In order to develop the present report, all case-study company interviews were further aggregated in overview tables, separating the "small and medium sized" and "large" case-study companies, allowing the detection of trends and "outliers".

68 For our research, we defined "outliers" as companies whose cost estimates, either in absolute terms or as a percentage of revenue, were found to be significantly either below or above those of other companies in the sample of similar size. In order to identify "outliers", we produced a ranking for each of the eight following observed cost data elements:

1. one-time cost (scenario 1) in absolute value;
2. one-time cost (scenario 2) in absolute value;
3. recurring cost (scenario 1) in absolute value;
4. recurring cost (scenario 2) in absolute value;
5. one-time cost (scenario 1) as a percentage of the case-study company's revenues;
6. one-time cost (scenario 2) as a percentage of the case-study company's revenues;
7. recurring cost (scenario 1) as a percentage of the case-study company's revenues;
8. recurring cost (scenario 2) as a percentage of the case-study company's revenues.

69 We then counted the number of times a case-study company ranked in the top or bottom for each of the eight cost data elements[9]. Case-study companies that ranked in the top or bottom for more than half of the above-mentioned categories were defined as "outliers". Based on this approach, we identified as "outliers": four "large" case-study companies out of a total of fourteen (or 29%), and; one "small and medium sized" case-study company out of a total of six (or 17%).

70 The "outliers" were further analysed, to allow the performance of deeper content checks and discussions with sources other than the interviewed representative of the case-study company. Expert discussions were held with IT-specialists on estimated complexity and costs and financial data was re-validated.

71 It is important to point out that, whilst we have categorised some case-study companies as "outliers" as described above, we have no reason to assume that the cost estimates provided by these case-study companies are either overestimated or underestimated. The fact that these companies reported administrative costs that were significantly higher or lower than the administrative costs of the other case-study companies is due to particular characteristics of either the industry or the case-study company itself, which we have not found at other case-study companies in our sample. Furthermore, all case-study companies were randomly selected and there was no particular prediction that certain case-study companies would have costs significantly higher or lower than the others. However, as we will describe later in the report, we tend to believe that, if the sample were extended, other similar case-study companies would provide us with similar data. Therefore, we have chosen to briefly comment on each case-study company in this group in separate paragraphs, where relevant.

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[9] For the "large" case-study companies top and bottom were defined as top 2 and bottom 2. For the "small and medium sized" case-study companies, given the smaller sample size, top and bottom were confined to the first and last position in the ranking.

V   Impact on Administrative Costs and Cash-Flow

72 This section of the report discusses the findings of our exploratory research in terms of the additional administrative costs that would be caused by the introduction of the reverse charge mechanism.

73 The table mentioned in paragraph 28 and Appendix 4 lists the assumed information obligations of the two scenarios as mentioned above. We refer to Appendix 3.2 for the conversion between the information obligations and the activities performed.

74 The next section of the report discusses the findings of our research in terms of the additional administrative costs that are caused by the introduction of the reverse charge mechanism.

5.1   Which information obligation drives most of the costs

5.1.1   Scenario 1
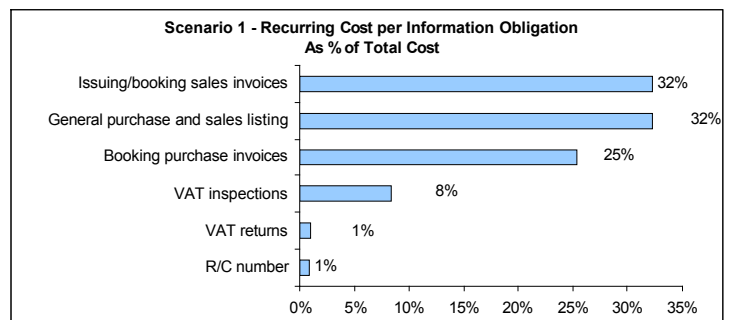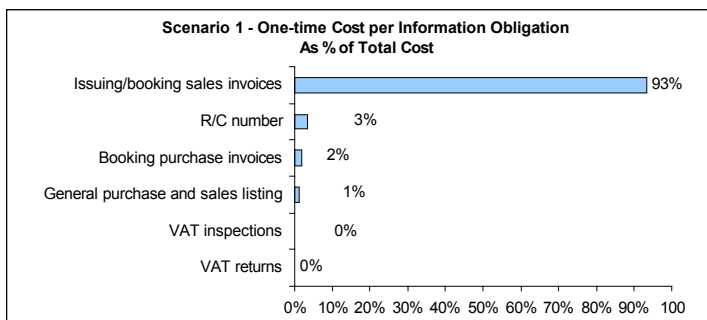
75 One-time

- The obligation to issue compliant sales invoices (I/O number 4) is by far the most costly information obligation, due to the requirement to apply the reverse charge only to invoices exceeding a specified threshold. The reasons for this are explored further in the next section of the report.

76 Recurring

- The highest recurring costs are caused by the obligation to file a general purchase and sales listing electronically (I/O number 5), the obligation to issue compliant sales invoices (I/O number 4) and the obligation to book purchase invoices correctly (I/O number 3).

- The costs are caused by additional efforts to prepare and verify daily listings and additional controls to ensure compliance of invoices. Further to the qualitative feedback provided during the interviews, we noticed that the high recurring cost related to the obligation to file a daily listing is mainly related to the frequency of the reporting obligation. A lot of case-study companies would require some manual intervention (e.g. checking, uploading and correcting errors) on a daily basis. The aggregated time spent for these single interventions (which are estimated to be less time-consuming than a single intervention on a monthly basis) is perceived as high. Case-study companies mentioned for instance the following possible errors with the listings: difficulties of correcting intra-day cut-off, other errors that might arise in the course of business (cancelled orders, incorrect deliveries, etc), especially if they were to be used to match with corresponding invoices with suppliers and customers.

Scenario 2

Scenario 2 - One-time Cost per Information Obligation
As % of Total Cost

Issuing/booking sales invoices	95%
R/C number	3%
Booking purchase invoices	2%
General purchase and sales listing	1%
VAT inspections	0%
VAT returns	0%

Scenario 2 - Recurring Cost per Information Obligation
As % of Total Cost

Issuing/booking sales invoices	41%
Booking purchase invoices	33%
General purchase and sales listing	14%
VAT inspections	10%
R/C number	1%
VAT returns	1%

77 One-time

- The obligation to issue compliant sales invoices (I/O number 4) is by far the most costly information obligation, due to the requirement to apply the reverse charge only to invoices exceeding a specified threshold. The reasons for this are explored further in the next section of the report, but case-study companies have mentioned that the cumulative threshold is especially cumbersome.

78 Recurring

- The highest recurring costs are caused by the obligation to issue compliant sales invoices (I/O number 4) and the obligation to book purchase invoices correctly (I/O number 3).

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5.2 Which case-study companies have higher costs and why

79 The table below summarises the relevant quantitative data from case-study companies interviewed[10]. The data is classified in three groups: "small and medium sized" case-study companies, "large" case-study companies and case-study companies for which the data was found to be significantly out of range with the other observations ("outliers"). This is not to say that this data was incorrect, but rather that the reasons for these high estimates were found to be specific to the company in question, and could hence not be generalised for the sample.

	One-time Cost in EUR		Recurring Cost in EUR		One-time Cost in % of Turnover		Recurring Cost in % of Turnover	
	Scenario 1	Scenario 2	Scenario1	Scenario 2	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Small and Medium Sized – 5 observations								
Average	7,345	7,363	4,425	2,163	0.022%	0.022%	0.013%	0.007%
Large – 10 observations								
Average	261,357	299,983	72,472	43,012	0.008%	0.009%	0.002%	0.001 %
Outliers– 5 observations								
Average	2,960,242	3,860,027	165,145	158,293	0.180 %	0.235 %	0.010 %	0.010 %
Total Sample – 20 observations								
Average	872,575	1,116,839	78,628	61,620	0.043%	0.055%	0.004 %	0.003 %

80 Given the small size of our total sample, the average figures above need to be interpreted with due care. First of all, it is not possible to draw conclusions from this sample with respect to the distribution of cost figures for the total population of companies that would be affected by the optional reverse charge mechanism. In general, a sample size of 50 or more observations is required to perform valid normality tests[11], Without the result of such tests, we cannot assume that the costs are normally spread, which limits the statistical analysis that can be applied to the results of our research to an analysis of basic descriptive statistics, such as the average costs listed above. Appendix 5 contains some additional descriptive statistics.

81 Notwithstanding the limited statistical significance of our observations, the results nonetheless reveal a lot about the possible impact of the optional reverse charge mechanism and especially about the underlying reasons as described in the following paragraphs.

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[10] Please note that slightly more case-study companies have been interviewed. However, only the case-study companies that provided sufficient quantitative data have been included in this section.

[11] JUDGE and others, *Introduction to the Theory and Practice of Econometrics*, Second Edition, Wiley and Sons, 1988

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5.2.1   One-time cost

82   Costs in this category are: updating vendor and supplier master data; training order entry and accounting staff; upgrading IT systems (e.g. creation of new tax codes and invoicing streams) in order to handle the thresholds and the development of new reports such as the sales and purchase listing. The majority of one-time costs are external, reflecting the fact that most case-study companies in the sample have outsourced their IT development.

83   The case-study companies in our sample used a variety of systems ranging from small ERP, bespoke systems to simple PC-based accounting packages. Small and medium sized case-study companies that made use of an ERP generally relied on the ERP vendor to provide them with system updates to guarantee compliance with the rules of the reverse charge mechanism, and therefore tended to have lower one-time costs. This is also explained by the fact that, given the limited size and complexity of these case-study companies, the ERP systems were not integrated in a larger IT environment, as was the case with some of the larger case-study companies.

84   In general, although the absolute amounts are lower, we observed that costs as a percentage of revenue are higher in the smaller case-study companies.

85   *Small and Medium Sized (SME) case-study companies*
   - The sample average one-time cost for the small and medium sized case-study companies interviewed amounts to EUR 7,345 or 0.022% of turnover in scenario 1. Classification of case-study companies as small or medium sized was done using the above-mentioned definition, which covers a broad range of case-study companies. Both in interpreting and extrapolating this number, due care must be taken.
   - The cost estimates provided by the small and medium sized case-study companies differ only slightly between scenario 1 and scenario 2. In scenario 2 the average one-time cost for the SME case-study companies interviewed amounts to EUR 7,363. In general, this similarity is due to the fact that small and medium sized case-study companies said that they would find a way to adjust their manual processes or invoicing agreements in a way to comply with the requirements of the threshold. For example, one company said they would ask their larger suppliers to group invoices. Other case-study companies simply said the EUR 40,000 cumulative threshold would not impact their business and therefore no structural additional effort would be made.

86 Large case-study companies

- The sample average one-time cost in scenario 1 for the large case-study companies in our sample stands at EUR 261,357, which is significantly higher than the small and medium sized case-study companies. The driving factor behind this high one-time cost is the adjustment of the IT system to be able to cope with the thresholds. Not surprisingly, all of the large case-study companies in our sample used one of the bigger ERP systems but, different from the small and medium sized case-study companies, these systems were heavily customised, had complex interfaces with other applications and were often installed in more than one location. Because of the integrated nature of these systems, the cost of introducing a reverse charge mechanism affects more than just the invoicing process and the accounting staff. VAT treatment of transactions – determined by using a "tax code" – is commonly defined at the moment of order entry. The invoicing process in most case-study companies is highly automated but not very sophisticated: invoices merely copy information from the orders and there is almost no reprocessing of information taking place.

- This is an important consideration, since the provisions of the reverse charge mechanism introduce requirements to process information at invoice level in order to determine the VAT treatment on the basis of the invoiced amount. This is apparently not the way a lot of the larger case-study companies have engineered their processes and systems today, which explains the relatively high one-time cost. In addition this means that also a lot of people outside the finance department need to be trained in the new requirements.

- The sample average one-time cost for the large case-study companies in our sample for scenario 2 is EUR 299,983 or 0,009% of annual turnover which is almost 15% higher than for scenario 1. This is explained by the additional expense for the implementation of the cumulative threshold. Contrary to their smaller counterparts, large case-study companies are faced with too many transactions to be able to deal with this manually.

87 Outliers

- One case-study company, active in the Transport & Logistics industry, provided high cost estimates due to the fact that it considered it would have to re-develop a custom built VAT module to support order-entry staff in deciding on the proper treatment at the time of order-entry. In our view it is not surprising that especially a company active in Transport & Logistics comes up with these figures. The VAT treatment of these types of services (transportation, logistics, handling, etc.) is currently already very complex. If, on top of these complex rules, the case-study company has to monitor one or more thresholds, the administrative cost can become very high.

- Three case-study companies provided high cost estimates to adjust their highly customised and integrated ERP systems. For two large case-study companies, the high estimate related to the fact that they used one central system to cover a broad range of operations and business functions across a number of geographies. Any change to these systems

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required them to conduct a thorough impact assessment and extensive testing, which explains the high cost estimates. A third (small or medium sized) case-study company produced a high one-time cost estimate, relative to its revenues, because it anticipated an important amount of test work on its newly implemented and not yet stable IT system.

- Finally, one case-study company that used an out-of-the-box ERP system, provided very low cost estimates because it expected the vendor to assume the responsibility for upgrading the system to comply with the provisions of the reverse charge mechanism (similar to some smaller case-study companies), without important additional charges.

5.2.2 Recurring cost

88 Costs in this category are: maintaining vendor and supplier master data; handling customer inquiries; verification of special reverse charge numbers; validation of VAT treatment of sales and purchase invoices; handling exceptions, credit notes, errors and omissions; monitoring compliance; preparing, verifying and submitting sales and purchase listings and VAT returns and finally maintaining records and cooperating with periodic inspections.

89 In general, case-study companies vary widely in their estimates as to the effort to validate the special reverse charge number, with most case-study companies limiting the effort to spot checks. Overall, this means that costs for this activity are likely to be underestimated if one would use these estimates to draw conclusions with regard to the administrative cost to validate all special reverse charge numbers for all relevant invoices.

90 *Small and Medium Sized (SME) case-study companies*
- The average yearly recurring costs for small and medium sized case-study companies in our sample amounts to EUR 4,425 or 0.013% of turnover (for scenario 1).
- This relatively high number – when compared with the one-time cost for the same group – is due to a combination of two factors.
- First of all, these case-study companies still rely quite heavily on manual processes. Second, they foresee a lot of room for errors, and hence a need for either upfront control or time spent on corrections.
- The cost estimates given by small and medium sized case-study companies for scenario 2 result in a sample average recurring cost of EUR 2,163 or 0,007% of turnover which is less than half the estimate for scenario 1. This is mainly due to the fact that case-study companies expect to spend a lot less time in preparing monthly listings (scenario 2) as opposed to daily listings (scenario 1).

91 *Large case-study companies*
- The average yearly recurring costs for large case-study companies in our sample amounts to EUR 72,472 or 0.002% of turnover (for scenario 1). Case-study companies, especially

those case-study companies with VAT registrations in several countries, expect to incur a lot of recurring costs in preparing and submitting the daily listings.

- The cost estimates given by large case-study companies for scenario 2 result in a sample average recurring cost of EUR 43,012 or less than half the estimate for scenario 1. This observation is consistent with the small and medium sized case-study companies.

92 Outliers

- Case-study companies in this category also have higher recurring costs than the other case-study companies in the sample, which is explained by the fact that they expect significant additional workload to deal with process exceptions, customer inquiries and manual controls and workarounds in order entry and invoicing.

5.2.3 Impact of the EUR 5,000 threshold

93 As part of our exploratory research, we asked case-study companies about the value of their sales and purchases that would be affected by the EUR 5,000 threshold. The results are summarised in the table below. We also asked about the volume of invoices, but we did not obtain sufficiently consistent answers to derive meaningful generalisations.

94 Smaller case-study companies mentioned that around 40% of the value of their sales and purchases would be affected, as this relates to invoices above EUR 5,000. Unsurprisingly, large case-study companies are a lot more affected, with even up to 91% of purchases being affected. For consistency, the "out of range" category is mentioned separately, although for the sake of this analysis, the numbers are not out of line with the overall observations.

Group	Value of sales invoices above EUR 5,000 in % of total sales	Value of purchase invoices above EUR 5,000 in % of total purchases
SME	39%	42%
Large	60%	91%
Outliers	49%	63%
Total	50%	70%

5.3 What drives the cash flow advantage/disadvantage

95 For 19 of the 20 interviewed case-study companies, the cash flow data collected was complete and could be used to compute the cash flow advantage or disadvantage resulting from the described reverse charge mechanism. For the purpose of this exercise, scenario 1 (invoice threshold of EUR 5,000) was used as situational basis.

96 We looked at the following payment flows in order to calculate the cash flow advantage/disadvantage: VAT payments to suppliers, VAT payments received from customers, VAT payments to/refunds from the tax authorities. A detail of the calculation model used can be found in Appendix 3.3.

97 The small sample does not allow any extrapolation, but gives an indication in terms of ranges within which case-study companies are impacted and types of case-study companies that will either profit from a positive or suffer a negative cash flow impact resulting from the introduction of the reverse charge mechanism as described earlier.

98 In absolute terms, the cash flow impact for the interviewed sample case-study companies shows a large variation: as indicated in the graph below, two case-study companies lie at the extremes of EUR (300,000) and EUR 300,000 yearly. Twelve companies show an impact of between EUR (10,000) and EUR 10,000. On average, this results in a positive impact of close to EUR 9,000 per case-study company in the sample.

99 Three of the case-study companies show a zero cash flow impact. This is due to the fact that the payment terms towards suppliers and customers are identical with the VAT payment or recovery terms. This means that VAT exchanges between the customers, the suppliers, the case-study company as well as the tax authority are immediate. Based on our theoretical model, a reverse charge would not impact the cash flow of these case-study companies. In reality, a minor impact is to be expected.

Cash-flow impact in absolute terms (EUR)
- in ascending order -
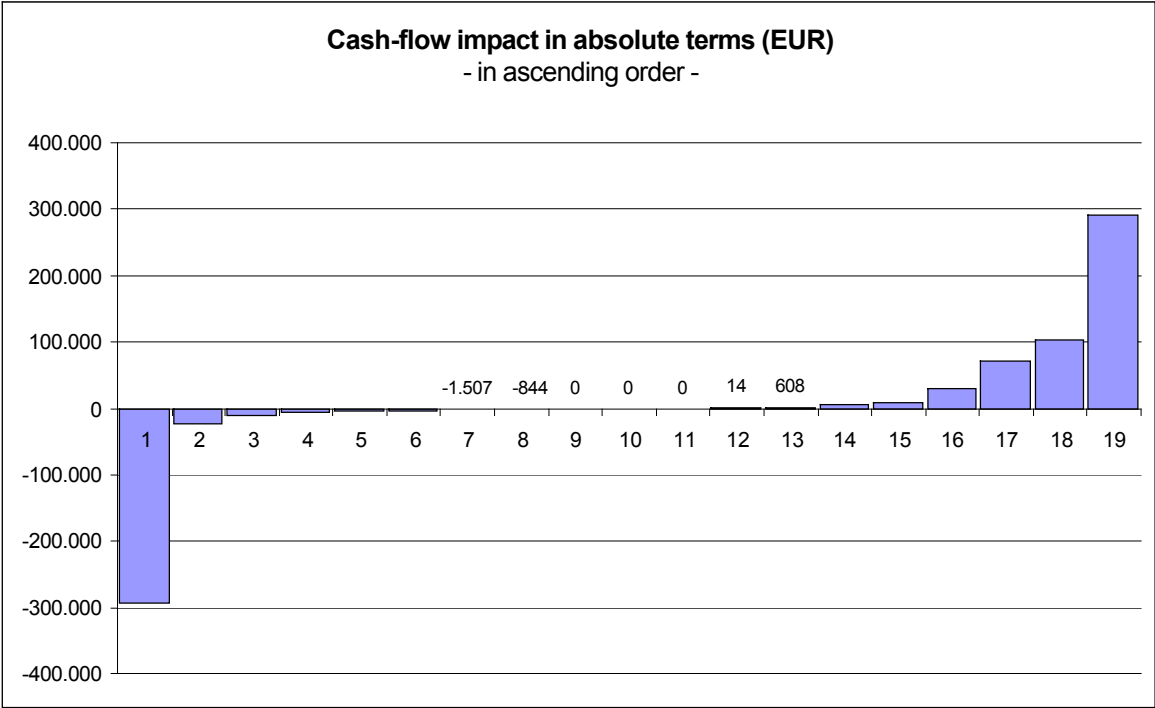
100 In relative terms, as a percentage of yearly turnover, the variation in the sample is smaller and lies in a range of between -0.03% and +0.045%. The average for the sample case-study companies is positive at 0.001% of turnover.

Cash-flow impact in relative terms (% of turnover)
- in identical order than previous graph -
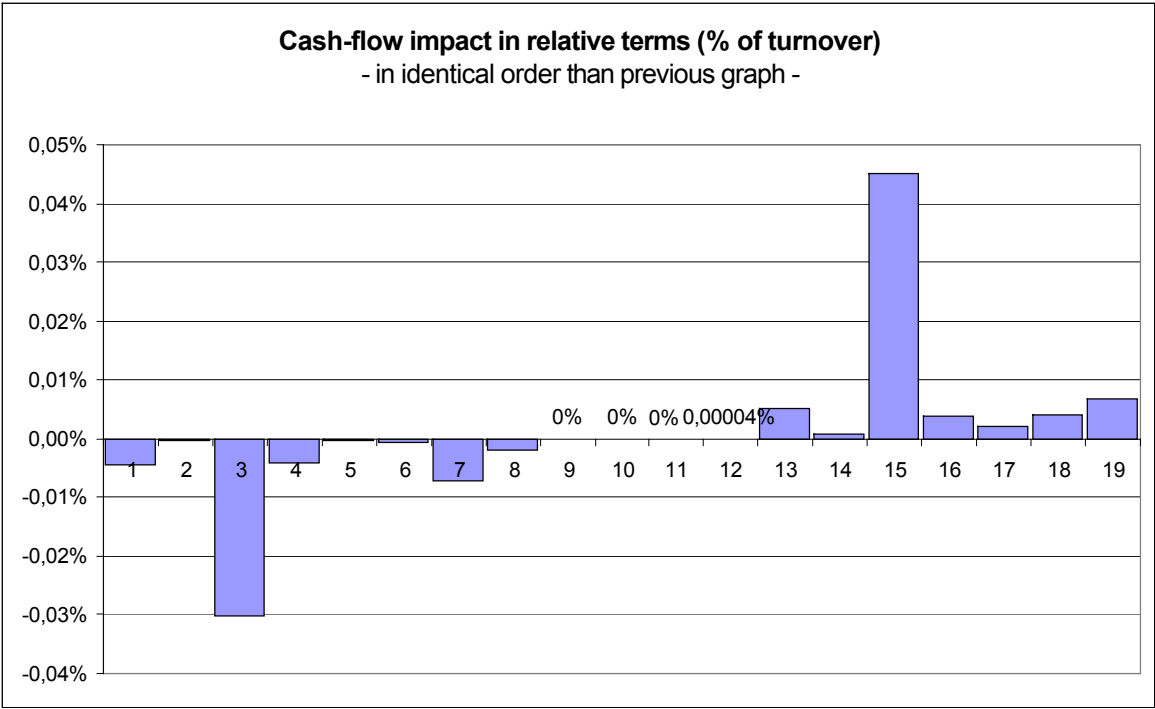
101 In the sample investigated, the average cash flow impact for small or medium sized case-study companies is negative, while the average impact on the large case-study companies interviewed is positive. From our sample, we were unable to identify the underlying reasons for this. No difference between the Member States could be detected.

102 Furthermore, it should be noted that some case-study companies informed us that, depending on the negotiating power with their suppliers and customers, the cash flow advantage would be (partially) transferred to the strongest party and a cash flow disadvantage would be (partially) transferred to the weakest party. For instance, the cash flow advantage realised by a company on its accounts payables side, would be partially transferred to suppliers with a strong bargaining power. On the other hand, a company with a strong bargaining power that suffers a cash flow disadvantage would try to transfer this disadvantage to suppliers or customers with less bargaining power.

103 Case example: Positive cash flow impact

- *This large company is active in the production of canned food. It purchases its goods mainly nationally but exports the largest part of its production. As a result, the company is today in a recovery situation for VAT. With VAT recovery terms being longer than invoice payment terms for suppliers, this brings the company into a pre-financing situation.*

- *Because most of the purchases and all sales of this B2B company are above the threshold of EUR 5,000, introducing the reverse charge mechanism would reduce the pre-financing.*

104 Case example: Negative cash flow impact

- *This large business-to-consumer (B2C) retailer purchases large part of its goods nationally and sells nationally only. Sales to franchisees would fall under the reverse charge mechanism. All other sales are B2C or below the threshold. The strong purchasing power, gives the company the possibility to impose payment terms on its suppliers that largely exceed the VAT payment terms.*

- *With the introduction of the reverse charge, the company would lose the resulting cash flow advantage. It is interesting that the company does not fear a bottom-line impact and says it will pass on this cost to the suppliers.*

5.4 Qualitative Findings

5.4.1 Impact on the Single Market

105 Most case-study companies do not see an impact on the competitiveness of their business and would not relocate or select other suppliers if a general reverse charge mechanism were introduced.

106 However, three case-study companies out of the 20 case-study companies said the introduction of a reverse charge could be a trigger for them to reconsider their European footprint, i.e. their sales structure, operational structure, supply chain, etc. Some of them apply local VAT to avoid that their customers are confronted with VAT and Intrastat obligations related to intra-Community trade. Even though the majority of the case-study companies confirmed that VAT is not by itself a criterion for relocating businesses, it was clear that these additional costs related to the reverse charge mechanism can be an additional argument for (re)considering a planned relocation for other reasons.

107 One case-study company would consider relocating its import hub(s) for the EU in order to avoid local sales of goods out of that hub being subject to the general reverse charge with a threshold. It would consider setting up business flows in such a way as to have as much intra-Community supplies as possible and as few local sales as possible. The case-study company stressed that a reverse charge mechanism applying to all invoices would not be an issue. However, coping with the threshold was of such a concern to that case-study company that it would investigate the possibility of relocating its import hub.

108 Another case-study company mentioned that, although competitiveness in the strict sense was not impacted, it feared increased competition from businesses that do not comply with the VAT legislation. This case-study company felt that some of its competitors are deliberately not (always) in compliant with the VAT rules, if their customers request for a different VAT treatment on the invoice. Those competitors take this risk assuming that no tax inspection will take place or that this will not be discovered during a tax inspection. Those competitors would have a competitive advantage. This conclusion is in line with a more general finding amongst the case-study companies that there is little faith in tax authorities' power to control this reverse charge mechanism.

109 In that respect, a significant number of large case-study companies mentioned the need for a level-playing field in terms of administrative obligations and VAT inspections across the EU.

110 Furthermore, it should be noted that the general reverse charge mechanism is perceived as an additional burden (cost) for businesses without offering any advantage in return for business. This extra cost and especially the potential risk to be held liable in case of non-compliance is seen as non-business-friendly and having an impact on business (though not affecting the competitive position).

5.4.2 Other qualitative feedback from case-study companies

111 Specific Reverse Charge versus General Reverse Charge

- A majority of the case-study companies were clearly of the opinion that a product based specific reverse charge would increase complexity compared to a general reverse charge mechanism on the basis of a threshold. Some case-study companies were neutral or in favour, but this was mainly due to the fact that these case-study companies assumed that their products would not be impacted by the specific product based reverse charge mechanism.

- A lot of the case-study companies expressed a shared concern that a product definition would be open to interpretation.

- There was a general preference for applying a reverse charge to all invoices of identified case-study companies meeting certain criteria (e.g. turnover) over use of a threshold linked to invoices. In that respect, the general consensus amongst the case-study companies is to keep the conditions as simple as possible and to avoid as much as possible any exceptions. One case-study company explicitly stressed the fact that imposing cumulative conditions (e.g. a threshold and a product specification) would increase the compliance cost significantly.

- Finally we noticed a general tendency that if the administrative burden for the case-study companies became too high, case-study companies would try to find pragmatic solutions instead of fully complying with the rules. A number of case-study companies informed us that they would try to make an agreement with the local VAT authorities to deal with exceptional situations (e.g. if a minority of the invoices were to be below the threshold, they would try to have an agreement with the tax authorities to always apply the reverse charge mechanism).

112 Scenario 1 versus Scenario 2

- 100% of the case-study companies said that the cumulative threshold would increase complexity and the administrative burden. However, the monthly purchase and sales listing in scenario 2 is less burdensome than the daily purchase and sales listing in scenario 1. This is reflected by the higher sample average one-time costs and the lower sample recurring costs in scenario 2 compared to scenario 1.

- Some large case-study companies said they would negotiate exemptions with their local tax inspector. These statements are in line with the general tendency that if the administrative burden for the case-study companies became too high, case-study companies would try to find pragmatic solutions instead of fully complying with the rules.

- Some smaller case-study companies said they would adjust their invoicing arrangements to fit the threshold requirements through grouped invoicing

- On the other hand, all case-study companies were in favour of a monthly listing instead of a daily listing as mentioned in scenario 1.

113 Introduction scenario

- The large case-study companies noted that there should be one reverse charge model and one set of compliance obligations across the EU.

- The large case-study companies, in particular, stressed the need for a sufficiently long transition period for business.

114 Other comments and remarks

- Although it is not possible to extract a general trend from interviews with only 20 case-study companies, it is apparent that, the more complex the business model of the case-study company is, the higher the administrative cost will be. In that respect the following elements were mentioned as important recurring costs: the number of possible VAT treatments for output transactions, especially where the VAT number is a determining element in order to apply the correct VAT treatment (e.g. transactions falling into the scope of art. 52 (b) of Directive 2006/112/EC), the number of VAT registrations, the number of possible VAT treatments of purchase invoices.

- As mentioned above, the impact on the IT system of the case-study companies is an important cost element. However, we noted that the cost of any change in the VAT system heavily depends on the characteristics of the current IT system. In that respect, we noted that following elements are crucial:
  - the degree of automation
  - the phase in the purchase or sales flow where the VAT treatment is determined

- Degree of automation

  We noticed that, if manual intervention is required the one-time cost is rather limited but the recurring administrative cost will be important. In the case of a highly automated IT system, the one-time cost is in general significant, but the recurring administrative costs are generally reduced.

  It should also be noted that some case-study companies have a mixed system, i.e. high automation of the sales process, but low automation of the purchase process (e.g. persons attributing tax codes manually to all purchase invoices). Consequently, it is not a straightforward task to determine the one-time cost and the recurring cost.

- Phase in the purchase or sales flow where the VAT treatment is determined

  We noticed that for a number of case-study companies, the VAT treatment is determined at the sales order process. However, at the moment of the order creation, the case-study companies do not yet know the taxable amount to be mentioned on the invoice, taking into account that a number of orders can be mentioned on one single invoice (for commercial reasons). This leads to either a significant one-time cost as the IT system would have to be completely remodelled or to a significant recurring cost, as manual controls would have to be put into place.

115 As the case-study companies generally feel that the reverse charge mechanism would not have any advantage for them and that it would not bring any added value to the core activities of the case-study companies, they are of the view that they would have significant difficulties to train and to motivate their personnel to comply with the rules (accounts payable people, sales people, etc.).

116 The treatment of credit notes is generally perceived as a key factor of concern to all case-study companies. A number of case-study companies expressed their concern over non-harmonisation of the treatment of credit notes. This is the case, for instance, where one Member State requires to refer to the initial invoices and only credit the VAT amounts, another Member State requires to always credit the taxable amount and not the VAT amount, a third Member State applies a threshold for the issuance of credit notes and a last Member State requires to change the VAT treatment of the initial invoices if the credit note reduces the initial taxable amount in such a way that it no longer reaches the threshold.

117 Finally, a number of the case-study companies raised the question as to whether the tax authorities would be able to analyse all the additional data provided in the daily or monthly listings. A lot of the case-study companies were convinced that the tax authorities would not be able to perform this analysis and consequently had questions as to the usefulness of the additional obligations.

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118 Suggestions and alternatives proposed by the case-study companies

- Some of the case-study companies made suggestions and proposed alternative models in order to tackle VAT fraud:
  - establish a reverse charge at company level (instead of threshold);
  - introduce PAN European VAT Grouping;
  - perform more frequent and targeted VAT inspections;
  - lower the VAT rate;
  - apply a reverse charge mechanism at the level of the VAT return and leave invoicing stream unchanged;
  - tackle fraud at the buyer's side.

VI   Overall conclusions

119 Impact on Administrative Costs

- Introducing a reverse charge mechanism leads to both additional one-time and recurring administrative costs. The interviews revealed that the obligation to issue compliant sales invoices is by far the most costly information obligation. According to the businesses interviewed, this is mainly due to the requirement to apply the reverse charge only to transactions exceeding a specified threshold. Applying such a threshold is costly to automate and leads to manual treatments of exceptions. This is especially the case for the cumulative threshold, defined as part of the second scenario.

- The highest recurring costs are caused by the obligation to file a general purchase and sales listing electronically, the obligation to issue compliant sales invoices and the obligation to register purchase invoices correctly. The costs are caused by additional effort to register, prepare and verify daily listings and additional controls to ensure compliance of invoices. Case-study companies especially saw a lot of room for errors in the daily listings, due to difficulties of correcting intra-day cut-off and other errors that might arise in the course of business, especially if they were to be used to match with corresponding transactions with suppliers and customers.

- The recurring burden appears relatively high for small and medium sized case-study companies because these case-study companies still rely quite heavily on manual processes, and therefore see a lot of room for errors and hence a need for either upfront control or time spent on corrections.

120 Cash flow impact of a reverse charge mechanism

- We found that the cash flow impact mainly depends on the business model of the company and is influenced by the import/export situation of the company as well as payment lead times towards both suppliers and customers. In the sample of companies we investigated, the average cash flow impact for small and medium sized case-study companies is negative, while the average impact on the large case-study companies interviewed is positive. From our sample, we were unable to identify the underlying reasons. The overall impact for our sample was, however, found to be positive at EUR 9,000 per case-study company on average.

121 Impact of the reverse charge mechanism on the competitiveness of a company and the internal market

- Most case-study companies do not see an impact on the competitiveness of their business and would not relocate or select suppliers in specific countries depending on the introduction of the reverse charge. However, a minority of the case-study companies stressed concerns with regard to unfair competition from businesses that do not apply the

VAT legislation correctly. One case-study company would consider a possible relocation of its import hub.

122 Other qualitative feedback from the interviewed businesses

- The 20 case-study companies have given insight in what lives within the companies with respect to the introduction of a reverse charge. The administrative costs of the presented scenarios are a real concern, as are the concerns for a lack of uniformity in rules and inspection. By using criteria such as simplicity and uniformity, there are – in the view of the interviewed companies – alternative solutions to combat fraud perhaps more effectively than the general reverse charge mechanism.

APPENDICES

Appendix 1 - Tables and sources of external data used

A. Wages:

The wages used for processing input gathered during the interviews are country specific. These costs represent a total cost for the employer including a base salary, material and overhead cost. Overheads are those costs that relate to fixed administration costs, such as expenses for premises (rent or building depreciation), telephone, heating, electricity, IT equipment, etc. These are calculated by applying a standard percentage mark-up (**30% of the time-based costs**) as recommended by the Standard Cost Model (SCM).

External Cost (especially IT-related cost) is included in acquisition cost.

1. UK

Table 1.1: UK - Wage rates used for different staff types.

Category	Wage rate (£ per hour)
Directors	46.04
Managers and owners	16.23
Internal professionals (e.g. Lawyers, accountants, teachers)	18.00
Technicians /Officers (e.g. nurses, building inspectors, estate agents)	12.70
Administrative and clerical staff	8.28
Skilled/Unskilled trades	7.27
Other	9.48

Source: Administrative Burdens Measurement Exercise, Technical Summary. June 2006. PricewaterhouseCoopers, http://www.dti.gov.uk/files/file35995.pdf.

2. Belgium

Table 2.1: Belgium – Wage rates used for different staff types.

Category	Wage rate (EUR per hour)
Supporting administrative personnel	27
Executing administrative personnel	32
Management	59

Source: "Het Kafka Meetmodel", Dienst voor Administratieve Vereenvoudiging (Office of Administrative Simplification), Idea Consult, www.vereenvoudiging.be, Belgium, 46 pages

3. The Netherlands

Table 3.1: The Netherlands – Wage rates used for different staff types.

Category_Name1	Category_Name2	Wage rate (EUR per hour)
Low position level	Supporting administrative personnel	30
Medium position level	Executing administrative personnel	45
High position level	Management	60

Source: "METEN IS WETEN", Handleiding voor het definiëren en meten van administratieve lasten voor het bedrijfsleven, (Interdepartementale Projectdirectie), Den Haag, December 2003, 53 pages.

4. Hungary

Category	Wage rate (HUF per hour)
Supporting administrative personnel	1582
Executing administrative personnel	2397*
Management	3188

* Based on monthly growth wage of 253,55, and an additional 30% overhead. The split applied for Admin personnel (0.66) and Management (1.33) is based on standard deviations in other countries.

Source: *Employment and Earnings 1998-2005 (Labour Statistics), Hungarian Central Statistical Office, Budapest 2007, 224 pages.*

B. Exchange Rates

Data has often been gathered in local currencies. The exchange rates used are:

Currency (date)	X-rate
EUR	1
USD (08 May 2007)	1.35
GBP (07 May 2007)	0.7
HUF (07May 2007)	246

Source: *European Central Bank, www.ecb.int.*

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Appendix 2 - Face-to-face questionnaire

2.1   INTERVIEW GUIDELINES FOR FACE-TO-FACE INTERVIEW

Interview Guidelines

IDENTIFICATION:

Company Name: _____

Country:

Companies: Name: _____

Position: _____

Contact details: _____

Companies: Name: _____

Position: _____

Contact details: _____

Companies: Name: _____

Position: _____

Contact details: _____

COMPANY DETAILS:

Activities of the company (products/services):

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...



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Headcount: _____

ANNUAL TURNOVER: _____

ANNUAL BALANCE SHEET TOTAL: _____

QUALIFYING AS: Large Company

Small or Medium Sized Company

N.B. Criteria to qualify as an SME (from an EU viewpoint):

- *staff headcount of less than 250, and*

- *annual turnover of not more than EUR 50 mio, or*

- *annual balance sheet of total not more than EUR 43 mio.*

- **Countries from which goods are purchased / to which goods are sold:**

	Purchases from…	Sales to …	Established	Non Established
• Austria	☐ .	☐ .	☐ .	☐ .
• Belgium	☐ .	☐ .	☐ .	☐ .
• Bulgaria	☐ .	☐ .	☐ .	☐ .
• Cyprus	☐ .	☐ .	☐ .	☐ .
• Czech Republic	☐ .	☐ .	☐ .	☐ .
• Denmark	☐ .	☐ .	☐ .	☐ .
• Estonia	☐ .	☐ .	☐ .	☐ .
• Finland	☐ .	☐ .	☐ .	☐ .
• France	☐ .	☐ .	☐ .	☐ .
• Germany	☐ .	☐ .	☐ .	☐ .
• Greece	☐ .	☐ .	☐ .	☐ .
• Hungary	☐ .	☐ .	☐ .	☐ .
• Ireland	☐ .	☐ .	☐ .	☐ .
• Italy	☐ .	☐ .	☐ .	☐ .
• Latvia	☐ .	☐ .	☐ .	☐ .
• Lithuania	☐ .	☐ .	☐ .	☐ .
• Luxembourg	☐ .	☐ .	☐ .	☐ .
• Malta	☐ .	☐ .	☐ .	☐ .
• Netherlands	☐ .	☐ .	☐ .	☐ .
• Poland	☐ .	☐ .	☐ .	☐ .
• Portugal	☐ .	☐ .	☐ .	☐ .
• Romania	☐ .	☐ .	☐ .	☐ .
• Slovakia	☐ .	☐ .	☐ .	☐ .
• Slovenia	☐ .	☐ .	☐ .	☐ .
• Spain	☐ .	☐ .	☐ .	☐ .
• Sweden	☐ .	☐ .	☐ .	☐ .
• United Kingdom	☐ .	☐ .	☐ .	☐ .
• Countries outside EU	☐ .	☐ .	☐ .	☐ .
	☐ .	☐ .	☐ .	☐ .

Summary structure of the company (countries with established / non-established businesses)

> …

Organisation of the VAT-department (in-house, shared-service-centre, outsourcing):

> …

Software used for accounting purposes:

> …

PART 1 - Understanding of the to be scenario?

Q1: Do you have any general questions concerning these reverse charge scenarios? i.e. further information that you need in order to estimate the administrative effort required to comply?

(ONLY RECORD ADDITIONAL QUESTIONS NOT ANSWERED IN THE Q&A SECTION)

A1:

> …

PART 2 – Presentation of the framework

In order to estimate the change in administrative burden / cost resulting from the introduction of a reverse charge mechanism, we will take you through the different activities that might be impacted – these relate to sales, purchasing and VAT-compliance.

SEE DOCUMENT "COMPANY INTERVIEW OUTLINE" FOR PROCESS FLOW DETAILS.

PART 3 – Cost estimation for each impacted activity.

N.B.: The reverse charge is applicable on invoices above EUR 5,000 (scenario 1) and invoices above EUR 5,000 or EUR 40,000 per customer (scenario 2)

Currency	Exchange rate / EUR	Interval
EUR	1	5,000 - 40,000
GBP	0.67961	3,398 - 27,184
HUF	245.587	~ 1.2 mio – 9.8 mio

Q3.1 Scenario 1:

We would like to understand what administrative activities you would undertake in order to prepare and provide the information required under this new reverse charge VAT-system. We will first run through this exercise for scenario 1, later we will check for any differences that may be seen in scenario 2.

FILL IN EXCEL SHEET: "ACTIVTY LIST AND COST MODEL: SCENARIO 1" (APPENDIX 2)

Q3.2 Scenario 2:

If we now look now at scenario 2: what activities and costs are impacted by this difference in assumptions and what are the new estimated costs per activity?

FILL IN EXCEL SHEET: "ACTIVTY LIST AND COST MODEL: SCENARIO 2".

Q3.3: We assume that two years after the first 7 EU countries have introduced a general reverse charge, an additional 6 countries will introduce it. Will your company be impacted by this change in terms of administrative costs incurred?

```
...
```

PART 4 – Cash Flow Impact

The introduction of a reverse charge will have an impact on the cash flow of your company. Our simplified models estimate the cost impact of such a shift based on the following data:

FILL IN QUESTIONS BELOW OR IN THE EXCEL SHEET: "CASH FLOW IMPACT".

Q4.1 What is the VAT Cycle? (How often do you have to fill in the VAT statement)?

A4.1   Monthly

Quarterly

Yearly

Other (specify) _____

Q4.2 What are the terms of payment of the VAT due?

A4.2   30 days

             60 days

             90 days

             Other (specify)_____

Q4.3 Within what timescales do you recover VAT after submission of your VAT form?

A4.3   30 days

             60 days

             90 days

             Other (specify)_____

Q5.4 What are the terms of payment towards suppliers (DPO – days payable outstanding, in days on average?)

A5.4   _____ days

Q4.5 What are the terms of payment for sales? Clients' terms of payment (DSO – days sales outstanding, in days on average?)

A4.5   _____ days

Q 4.6 Could you please give us an overview of "Turnover" / month (or average per month if linear)?

A4.6 Jan   _____   **OR:** Average per month _____

      Feb   _____

      Mar   _____

      April _____

      May   _____

      June _____

      July   _____

      August _____

      Sept _____

      Oct   _____

      Nov _____

      Dec _____

Q4.7 Can you define the proportion of the revenue impacted by VAT?

A4.7 _____ %

Q4.8 Can you give us the average VAT rate applicable for the revenue impacted by VAT?

A4.8 _____%

Q4.9 What percentage of the revenue impacted by VAT is falling under the reverse charge mechanism (invoices > EUR 5,000, see table in part 3 for exchange rates)

A4.9 _____%

Q4.10   Could you please give us an overview of "Cost" / month (or per year if linear)?

A4.10 Jan   _____   **OR:**   Average per month _____
       Feb   _____
       Mar   _____
       April   _____
       May   _____
       June   _____
       July   _____
       August _____
       Sept   _____
       Okt   _____
       Nov   _____
       Dec   _____

Q4.11 Can you define the proportion of the cost impacted by VAT?

A4.11 _____%

Q4.12 What is the average VAT on cost?

A4.12 _____%

Q4.13 What percentage of the cost impacted by VAT is falling under the reverse charge mechanism (invoices > EUR 5,000, see table in part 3 for exchange rates)

A4.13 _____%

Q4.14 What short-term cost of financing should we use to estimate the impact of the VAT shift?

A4.14 _____%

PART 5 – Qualitative Assessment of the Impact

Q5.1: If the EC decided for a specific reverse charge (on specific products, e.g. mobile phones or computer chips), would this add less / more complexity than a general reverse charge (on all products)?

A5.1

```



```

Q5.2 If your country decides to introduce the reverse charge mechanism, while other countries do not, how will this affect your competitiveness?

A5.2

```



```

Q5.3: Considering that certain countries will apply the reverse charge mechanism, while other will not, how will this affect your decisions in terms of (re-)location of your business entities?

A5.3:

```



```

Q5.4: How will it affect your choice of suppliers?

A5.4:

```



```

Q5.5: Are there any other positive or negative effects of such a reverse charge mechanism that we have not discussed so far?

A5.5:

PART 6: ACTION POINTS

The following action points have been agreed during the interview:

ACTION	DUE DATE	RESPONSIBLE

Thank you.

--- **END OF THE INTERVIEW** ---

2.2 COMPANY INTERVIEW OUTLINE

Impact of a "General Reverse Charge Mechanism"

COMPANY INTERVIEW OUTLINE

April 2007

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Purpose of the study and this interview.

- On 31 May 2006, the European Commission adopted a communication (COM(2006)254) whose aim is to launch a debate with all parties concerned on a European strategy to combat tax fraud. In the framework of this debate, a number of EU Member States proposed introducing a general reverse charge system as a solution to tackle VAT fraud.

- As a result, the European Commission decided to investigate the various impacts of the potential introduction of such a reverse charge VAT-system throughout the European Union.

- In the present study, of which this interview is an essential part, PwC assesses the impact of such a change in the VAT-system on a **number of aspects**:

    1. The **impact on administrative costs** (time or money spent on each activity necessary to comply with the obligations imposed by the regulation) required to comply with the new VAT-regulation.

    2. The cost / benefit for the company resulting from a shift in **timing of cash-flow.**

    3. The view of businesses on the impact on their **competitiveness.**

- The interview will take approximately 2 hours. This is an opportunity for your organisation to provide the European Commission with input on the impact that a change in the VAT-system would have on your business.

- Companies participating in this study will receive privileged access to the results of the study

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Confidentiality statement.

All information and data gathered in the course of this interview is confidential and reported

by PwC to the European Commission in anonymous, aggregate form. At no stage will

information relating to any individual or individual organisation be published, nor will

individuals or their organisations be identified to anyone outside the interview team.

Any documents shared with you as part of your participation should also be treated

confidentially and should not be disclosed to any other third party without the prior consent of

the European Commission.

Interview overview.

1	Presentation
	Assumptions of the proposed VAT-system being investigated.

2	Data Collection
	Company background.

3	Data Collection
	Cost impact per activity.

4	Data Collection
	Impact on cash-flow timing.

5	Assessment
	Impact on competitiveness.

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Presentation

Assumptions

For the purpose of this study we have made the following assumptions:

General assumptions:

- The general reverse charge mechanism will be optional for EU Member States.
- EU member states will have autonomy over precisely how the mechanism is implemented (e.g. thresholds, type and frequency of reporting etc.).
- EU member states will also be free to introduce the general reverse charge mechanism at on a date of their choice.
- For this study we assume that:
  - In a first phase and on the same date (e.g. 1 Jan 2008) 7 Member States will introduce a general reverse charge system.
  - In a second phase and on the same date (e.g. 1 Jan 2010) another 6 Member States will introduce a general reverse charge system.

Assumptions for the two proposed reverse charge scenarios being investigated:

SCENARIO 1	SCENARIO 2
• The reverse charge is applicable for individual **transactions above 5.000 Euro.**	• The reverse charge is applicable for transactions **above 5.000 Euro or 40.000 Euro per customer** (cumulative total for one month).
• A special **reverse charge VAT number** needs to be used by the company selling / buying goods under a reverse charge regime.	• A special **reverse charge VAT number** needs to be used by the company selling / buying goods under a reverse charge regime.
• A **general purchase and sales listing** must be filed on a **daily basis**, listing **each individual transaction** subject to the reverse charge (VAT number of the supplier, special reverse charge number of the customer, invoice number, invoice date, taxable amount).	• A **general purchase and sales listing** must be filed on a **monthly basis**, identifying the **total amount of sales to each customer** in respect of whom the reverse charge was applied (VAT number of the supplier, specific reverse charge number of the customer, total taxable amount for each customer).

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Data Collection

Cost impact per activity.

- In the present study, of which this interview is an essential part, we assess the impact of a change in the VAT- system on the administrative costs incurred by businesses in complying with VAT-regulation.
- This focus on the "Administrative Cost" of complying with regulation is driven by the "Better Regulation" objective of the European Union's policy. This policy aims to ensure that the regulatory environment is simple and of high quality.
- The methodology applied here is based on a methodology known as the 'Standard-Cost-Model'. This model is currently in use across Europe to measure the administrative cost and administrative burden of regulations. The model essentially takes an ABC (activity based costing)-approach. **It looks at the time or money spent on each activity necessary to comply with the information obligations imposed by the regulation.**
- The administrative burden is that part of the administrative costs that a business sustains only because it has to comply with regulation. The administrative burden is thus a subset of the administrative costs that a business will incur when complying with a regulation (i.e. it excludes 'business as usual' costs').
- On the next pages, we present the process-flows and activities that we believe will be impacted by a change in the VAT-system. The processes are split into "Purchasing", "Sales" and "VAT-compliance". Both one-off and recurring activities are considered.
- A cost-model will be created for your company based on the answers to the following questions for each activity:
  1. Is the activity impacted by the proposed change in the VAT-system?
  2. If so, by what type/level of resource is this activity performed and how much does the time spent on this activity increase or decrease?
  3. Are there one-time investments required for this activity? If so, how much might they cost?

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Data Collection

Sales (Order to Cash)

	Quotation	Confirm Orders	Invoice Customers	Process A/R and manage collections	Manage / process adjustments
Preparatory Activities	• Update customer master data. • Update contractual terms on quotation. • Update procedure manuals. • Adapt IT systems to reflect correct VAT-treatment on quotes. • Adapt IT system to allow inputting of reverse charge number. • Testing of system changes. • Give special training to sales team.	• Update contractual terms for orders. • Update procedure manuals. • Adapt IT systems • Perform user-tests on system changes. • Give special training to sales back-office team.	• Familiarization with new VAT obligations. • Update contractual terms. • Update procedure manuals. • Create reverse-charge-number field in customer master database. • Update reverse charge numbers in customer master file. • Set-up new tax codes and rules in IT system • Perform user-tests on system changes. • Update product master file. • Create new invoice template. • Give special training to accounting department.	• Update procedure manuals. • Adapt IT systems • Perform user-tests on system changes. • Give special training.	• Update contractual terms. • Update procedure manuals • Adapt IT systems • Perform user-tests on system changes. • Give special training.
Recurring Activities	• Maintain customer master data. • Develop quotation. • Get tax-input for non-standard deals. • Determine logistics & shipping. • Give recurring training to sales team.	• Enter orders onto system. • Handle customer inquiries. • Give recurring training to sales back-office team.	• Maintain customer master file. • Maintain product master file. • Validate customer reverse charge-number on invoices. • Validate VAT rates on invoice. • Prepare bills to customers. • Post A/R entries. • Resolve customer billing questions. • Give recurring training to accounting department.	• Prepare A/R reports • Post A/R activity to general ledger • Follow-up on outstanding payments. • Maintain IT systems. • Give recurring training.	• Analyze complaints. • Prepare complaint-related credit-notes. • Enter complaint related credit-notes in system. • Analyze bonuses/discounts. • Prepare bonus/discount-related credit-notes. • Enter bonus/discount-related credit notes in system. • Give recurring training.

Data Collection

Purchasing (Procure to Pay)

	Select suppliers and develop contracts.	Order & Receive Goods or Services	Process Accounts Payable
Preparatory Activities	• Inform suppliers about reverse charge number to be used. • Update contractual terms. • Update procedure manuals. • Adapt IT systems. • Perform user-tests on system changes. • Give special training.	• Update procedure manuals. • Adapt IT systems • Perform user-tests on system changes. • Give special training.	• Familiarisation with new requirements. • Update contractual terms. • Update procedure manuals. • Set-up VAT codes in IT System. • Perform user-tests on system changes. • Give special training.
Recurring Activities	• Identify new suppliers. • Negotiate contracts. • Collect supplier information. • Manage supplier information. • Give recurring training.	• Process purchase orders. • Approve purchase orders. • Record receipts of goods. • Give recurring training.	• Maintain AP/PO vendor master file. • Audit invoices on VAT applied. • Input invoice data into AP system. • Process complaints and credit notes received. • Verify bonus/discount application and process credit-notes. • Respond to supplier inquiries. • Give recurring training.

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Data Collection

Comply with VAT obligations

Register for VAT	File purchase and sales listing	File periodic VAT returns.	Communication with tax authorities

Preparatory Activities

• Familiarisation with requirements. • Obtain a new VAT-number	• Create new reports in system • Perform user-tests on system changes. • Update procedure manuals. • Give special training.	• Update contractual terms. • Update procedure manuals. • Create new reports in system. • Perform user-tests on system changes. • Give special training.	

Recurring Activities

	• Gather necessary information to create listing. • Create listing. • Submit listing for validation. • Validate purchase and sales listing. • Submit purchase and sales listing. • Give recurring training	• Gather relevant information to create VAT return. • Prepare information to be reported. • Verify information to be reported. • Submit VAT return. • Give recurring training.	• Assist during / comply with tax inspections • Communicate with tax authorities in case of potential issues (e.g. asking for rulings / appeals) • Provide additional information requested by the tax authorities

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Data Collection

Impact on cash-flow timing.

The introduction of reverse charge will have an impact on the cash flow of your company. Our simplified model estimates the cost impact of such a change in the system based on the following data:

- Recurrence of VAT-file submission.
- Terms of payment of VAT due.
- Timing of VAT recovery following submission of VAT return.
- Average clients' terms of payment (DSO – days sales outstanding).
- Average terms of payment proposed to suppliers (DPO – days payable outstanding).
- Average revenue per month (or actual revenue per month if not linear).
- Proportion of the revenue impacted by VAT.
- Average VAT rate applicable for the revenue impacted by VAT.
- Average cost of purchases per month (or actual costs per month if not linear).
- Proportion of cost of purchases impacted by VAT.
- Average VAT rate applicable for the cost of purchases impacted by VAT.
- Short term cost of financing.

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Assessment

Impact on competitiveness.

Besides the quantifiable impact on administrative cost and cash-flow, the EC is also interested in businesses' perceptions of the impact of a reverse charge system on their competitiveness. For example:

- If the EC decided to adopt specific reverse charging on specific products, f.ex. mobile phones, computer chips…, would this add less or more complexity than a general reverse charge (on all products)?
- If your country decides to introduce the reverse charge mechanism, while other countries don't, how might this affect your competitiveness?
- Considering that certain countries will apply the reverse charge mechanism, while other will not, how will this affect your decisions in terms of (re-)location of your business-entities? And how will it affect the choice of suppliers?
- Are there any other positive or negative effects of such a reverse-charge mechanism that we have not discussed so far?

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Thank you for your participation.

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Appendix 3 - Data-model resulting from business interviews

3.1 ACTIVITY LIST AND COST MODEL

Proces Step	Proces Sub-Steps	One-time ?	Recurrent ?	Activity Nr.	Activities	Type of Resource (company specific)	Type of Resource (select from list - see sheet input staff)	Time spent	/	Unit of measure	Number of units	Acquisition costs (€)	Type	Description of cost.
1. Sales (Order-to-cash)										m			3	
	1.1. Quotation			1.1.						m			3	
		OT		1.1.1	Update customer master data.					m			3	
		OT		1.1.2	Update contractual terms on quotation.					m			3	
		OT		1.1.3	Update procedure manuals.					m			3	
		OT		1.1.4	Adapt IT systems to reflect correct VAT-treatment on quotes.					m			3	
		OT		1.1.5	Adapt IT system to allow inputting of reverse charge number.					m			3	
		OT		1.1.6	Testing of system changes.					m			3	
		OT		1.1.7	Give special training to sales team.					m			3	
			R	1.1.8	Maintain customer master data.					m			3	
			R	1.1.9	Develop quotation.					m			3	
			R	1.1.10	Get tax-input for non-standard deals.					m			3	
			R	1.1.11	Determine logistics & shipping.					m			3	
			R	1.1.12	Give recurring training to sales team.					m			3	
	1.2. Confirm Orders			1.2.						m			3	
		OT		1.2.1	Update contractual terms for orders.					m			3	
		OT		1.2.2	Update procedure manuals.					m			3	
		OT		1.2.3	Adapt IT systems					m			3	
		OT		1.2.4	Perform user-tests onto system changes.					m			3	
		OT		1.2.5	Give special training to sales back-office team.					m			3	
			R	1.2.6	Enter orders to system.					m			3	
			R	1.2.7	Handle customer inquiries.					m			3	
			R	1.2.8	Give recurring training to sales back-office team.					m			3	
	1.3 Invoice Customer			1.3.						m			3	
		OT		1.3.1	Familiarization with new VAT obligations.					m			3	
		OT		1.3.2	Update contractual terms.					m			3	
		OT		1.3.3	Update procedure manuals.					m			3	
		OT		1.3.4	Create reverse-charge-number field in customer master					m			3	
		OT		1.3.5	Update reverse charge numbers in customer master file.					m			3	
		OT		1.3.6	Set-up new tax codes and rules in IT system					m			3	
		OT		1.3.7	Perform user-tests on system changes.					m			3	
		OT		1.3.8	Update product master file.					m			3	
		OT		1.3.9	Create new invoice template.					m			3	
		OT		1.3.10	Give special training to accounting department.					m			3	
			R	1.3.11	Maintain customer master file.					m			3	
			R	1.3.12	Maintain product master file.					m			3	
			R	1.3.13	Validate customer reverse charge-number on invoices					m			3	
			R	1.3.14	Validate VAT treatment on invoice					m			3	
			R	1.3.15	Prepare bills to customers.					m			3	
			R	1.3.16	Post A/R entries.					m			3	
			R	1.3.17	Resolve customer billing questions.					m			3	
			R	1.3.18	Give recurring training to accounting department.					m			3	

Proces Step	Proces Sub-Steps	One-time ?	Recurrent ?	Activity Nr.	Activities	Time-based Cost					Acquisition costs			Description of cost.
						Type of Resource (company specific)	Type of Resource (select from list - see sheet input staff)	Time spent	/	Unit of measure	Number of units	Acquisition costs (€)	Type	
	1.4 Process A/R and manage collections.			1.4.						m			3	
		OT		1.4.1	Update procedure manuals.					m			3	
		OT		1.4.2	Adapt IT systems					m			3	
		OT		1.4.3	Perform user-tests on system changes.					m			3	
		OT		1.4.4	Give special training.					m			3	
			R	1.4.5	Prepare A/R reports					m			3	
			R	1.4.6	Post A/R activity to general ledger.					m			3	
			R	1.4.7	Follow-up on outstanding payments.					m			3	
			R	1.4.8	Maintain IT systems.					m			3	
			R	1.4.9	Give recurring training.					m			3	
	1.5 Manage / Process Adjustments and Bonuses/Discounts			1.5.						m			3	
		OT		1.5.1	Update contractual terms.					m			3	
		OT		1.5.2	Update procedure manuals.					m			3	
		OT		1.5.3	Adapt IT systems					m			3	
		OT		1.5.4	Perform user-tests on system changes.					m			3	
		OT		1.5.5	Give special training.					m			3	
			R	1.5.6	Analyze complaints.					m			3	
			R	1.5.7	Prepare complaint-related credit-notes.					m			3	
			R	1.5.8	Enter complaint related credit-notes in system.					m			3	
			R	1.5.9	Analyze bonuses/discounts					m			3	
			R	1.5.10	Prepare bonus/discount-related credit-notes.					m			3	
			R	1.5.11	Enter bonus/discount-related credit notes in system.					m			3	
			R	1.5.12	Give recurring training.					m			3	

PriceWaterhouseCoopers

Proces Step	Proces Sub-Steps	One-time ?	Recurrent ?	Activity Nr.	Activities	Type of Resource (company specific)	Type of Resource (select from list - see sheet input staff)	Time spent	/	Unit of measure	Number of units	Acquisition costs (€)	Type	Description of cost.
2. Purchasing (Procure to Pay)										m			3	
	2.1 Select Suppliers & Develop Contracts			2.1.						m			3	
		OT		2.1.1	Inform suppliers about reverse charge number to be used.					m			3	
		OT		2.1.2	Update contractual terms.					m			3	
		OT		2.1.3	Update procedure manuals.					m			3	
		OT		2.1.4	Adapt IT systems.					m			3	
		OT		2.1.5	Perform user-tests on system changes.					m			3	
		OT		2.1.6	Give special training.					m			3	
			R	2.1.7	Identify snew suppliers.					m			3	
			R	2.1.8	Negotiate contracts.					m			3	
			R	2.1.9	Collect supplier information.					m			3	
			R	2.1.10	Manage supplier information.					m			3	
			R	2.1.11	Give recurring training.					m			3	
	2.2 Order & Receive Goods or Services			2.2.						m			3	
		OT		2.2.1	Update procedure manuals.					m			3	
		OT		2.2.2	Adapt IT systems					m			3	
		OT		2.2.3	Perform user-tests on system changes.					m			3	
		OT		2.2.4	Give special training.					m			3	
			R	2.2.5	Process purchase orders.					m			3	
			R	2.2.6	Approve purchase orders.					m			3	
			R	2.2.7	Record receipts of goods.					m			3	
			R	2.2.8	Give recurring training.					m			3	
	2.3 Process Accounts Payable			2.3.						m			3	
		OT		2.3.1	Familiarization with new requirements.					m			3	
		OT		2.3.2	Update contractual terms.					m			3	
		OT		2.3.3	Update procedure manuals.					m			3	
		OT		2.3.4	Set-up VAT codes in IT System.					m			3	
		OT		2.3.5	Perform user-tests on system changes.					m			3	
		OT		2.3.6	Give special training.					m			3	
			R	2.3.7	Maintain AP/PO vendor master file.					m			3	
			R	2.3.8	Audit invoices on VAT applied.					m			3	
			R	2.3.9	Input invoice data into AP system.					m			3	
			R	2.3.10	Process complaints and credit notes received.					m			3	
			R	2.3.11	Verify bonus/discount application and process credit-notes.					m			3	
			R	2.3.12	Respond to supplier inquiries.					m			3	
			R	2.3.13	Give recurring training.					m			3	

Proces Step	Proces Sub-Steps	One-time ?	Recurrent ?	Activity Nr.	Activities	Type of Resource (company specific)	Type of Resource (select from list - see sheet input staff)	Time spent	/	Unit of measure	Number of units	Acquisition costs (€)	Type	Description of cost.
3. Comply with VAT obligations										m			3	
	3.1 Register for VAT			3.1.						m			3	
		OT		3.1.1	Familiarization with requirements.					m			3	
		OT		3.1.2	Obtaining an new VAT-number					m			3	
	3.2 File purchase and sales listing.			3.2.						m			3	
		OT		3.2.1	Create new reports in system.					m			3	
		OT		3.2.2	Perform user-tests on system changes.					m			3	
		OT		3.2.3	Update procedure manuals.					m			3	
		OT		3.2.4	Give special training.					m			3	
			R	3.2.5	Gather necessary information to create listing.					m			3	
			R	3.2.6	Create listing.					m			3	
			R	3.2.7	Submit listing for validation.					m			3	
			R	3.2.8	Validate purchase and sales listing.					m			3	
			R	3.2.9	Submit purchase and sales listing.					m			3	
			R	3.2.10	Give recurring training.					m			3	
	3.3 File periodic VAT returns.			3.3.						m			3	
		OT		3.3.1	Update contractual terms.					m			3	
		OT		3.3.2	Update procedure manuals.					m			3	
		OT		3.3.3	Create new reports in system.					m			3	
		OT		3.3.4	Perform user-tests on system changes.					m			3	
		OT		3.3.5	Give special training.					m			3	
			R	3.3.6	Gather relevant information to create VAT return					m			3	
			R	3.3.7	Prepare information to be reported.					m			3	
			R	3.3.8	Verify information to be reported.					m			3	
			R	3.3.9	Submit VAT return.					m			3	
			R	3.3.10	Give recurring training.					m			3	
	3.4 Communication with tax authorities			3.4.						m			3	
			R	3.4.1	Assist during / comply with tax inspections					m			3	
			R	3.4.2	Communicate with tax authorities in case of potential issues					m			3	
			R	3.4.3	Provide additional information requested by the tax authorities					m			3	

Summary Sheet

One Time (All)

OT			Resource Cost	Acquistion cost		Resource Cost	Acquistion cost
1. Sales (Order-to-cash)							
	1.1	1.1. Quotation	0	0		0	0
	1.2	1.2. Confirm Orders	0	0		0	0
	1.3	1.3 Invoice Customer	0	0		0	0
	1.4	1.4 Process A/R and manage collections.	0	0		0	0
	1.5	1.5 Manage / Process Adjustments.	0	0		0	0
		Total	0	0		0	0
2. Purchasing (Procure to Pay)							
	2.1	2.1 Select Suppliers & Develop Contracts	0	0		0	0
	2.2	2.2 Order & Receive Goods or Services	0	0		0	0
	2.3	2.3 Process Accounts Payable	0	0		0	0
		Total	0	0		0	0
3. Comply with VAT obligations							
	3.1	3.1 Register for VAT	0	0		0	0
	3.2	3.2 File purchase and sales listing.	0	0		0	0
	3.3	3.3 File periodic VAT returns.	0	0		0	0
	3.4	3.4 Communication with tax authorities	0	0		0	0
	3.5	3.5. File requests for 8th Directive VAT refund	0	0		0	0
		total	0	0		0	0
		Total One-time	**0**	**0**		**0**	**0**

Reccurent

R			Resource Cost	Acquistion cost		Resource Cost	Acquistion cost
1. Sales (Order-to-cash)							
	1.1	1.1. Quotation	0	0		0	0
	1.2	1.2. Confirm Orders	0	0		0	0
	1.3	1.3 Invoice Customer	0	0		0	0
	1.4	1.4 Process A/R and manage collections.	0	0		0	0
	1.5	1.5 Manage / Process Adjustments.	0	0		0	0
		Total	0	0		0	0
2. Purchasing (Procure to Pay)							
	2.1	2.1 Select Suppliers & Develop Contracts	0	0		0	0
	2.2	2.2 Order & Receive Goods or Services	0	0		0	0
	2.3	2.3 Process Accounts Payable	0	0		0	0
		Total	0	0		0	0
3. Comply with VAT obligations							
	3.1	3.1 Register for VAT	0	0		0	0
	3.2	3.2 File purchase and sales listing.	0	0		0	0
	3.3	3.3 File periodic VAT returns.	0	0		0	0
	3.4	3.4 Communication with tax authorities	0	0		0	0
	3.5	3.5. File requests for 8th Directive VAT refund	0	0		0	0
		total	0	0		0	0
		Total Reccurent	**0**	**0**		**0**	**0**

Total

	Resource Cost	Acquistion cost		Resource Cost	Acquistion cost
Overall Total	**0**	**0**		**0**	**0**
	0	0		0	0

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3.2   ACTIVITY LIST AND INFORMATION OBLIGATIONS

Nr	Activities	IO
1.1.		0
1.1.1	Update customer master data.	2
1.1.2	Update contractual terms on quotation.	4
1.1.3	Update procedure manuals.	4
1.1.4	Adapt IT systems to reflect correct VAT-treatment on quotes.	4
1.1.5	Adapt IT system to allow inputting of special reverse charge number.	4
1.1.6	Testing of system changes.	4
1.1.7	Give special training to sales team.	4
1.1.8	Maintain customer master data.	2
1.1.9	Develop quotation.	4
1.1.10	Get tax-input for non-standard deals.	4
1.1.11	Determine logistics & shipping.	4
1.1.12	Give recurring training to sales team.	4
1.2.		0
1.2.1	Update contractual terms for orders.	4
1.2.2	Update procedure manuals.	4
1.2.3	Adapt IT systems	4
1.2.4	Perform user-tests onto system changes.	4
1.2.5	Give special training to sales back-office team.	4
1.2.6	Enter orders to system.	4
1.2.7	Handle customer inquiries.	4
1.2.8	Give recurring training to sales back-office team.	4
1.3.		0
1.3.1	Familiarization with new VAT obligations.	4
1.3.2	Update contractual terms.	4
1.3.3	Update procedure manuals.	4
1.3.4	Create reverse charge-number field in customer master database.	2
1.3.5	Update special reverse charge numbers in customer master file.	2
1.3.6	Set-up new tax codes and rules in IT system	4
1.3.7	Perform user-tests on system changes.	4
1.3.8	Update product master file.	4
1.3.9	Create new invoice template.	4
1.3.10	Give special training to accounting department.	4
1.3.11	Maintain customer master file.	2
1.3.12	Maintain product master file.	4
1.3.13	Validate customer reverse charge-number on invoices	2
1.3.14	Validate VAT treatment on invoice	4
1.3.15	Prepare bills to customers.	4
1.3.16	Post A/R entries.	4
1.3.17	Resolve customer billing questions.	4
1.3.18	Give recurring training to accounting department.	4
1.4.		0
1.4.1	Update procedure manuals.	4
1.4.2	Adapt IT systems	4
1.4.3	Perform user-tests on system changes.	4
1.4.4	Give special training.	4
1.4.5	Prepare A/R reports	4
1.4.6	Post A/R activity to general ledger.	4
1.4.7	Follow-up on outstanding payments.	🙢 4
1.4.8	Maintain IT systems.	4

Nr	Activities	IO
1.4.9	Give recurring training.	4
1.5.		0
1.5.1	Update contractual terms.	4
1.5.2	Update procedure manuals.	4
1.5.3	Adapt IT systems	4
1.5.4	Perform user-tests on system changes.	4
1.5.5	Give special training.	4
1.5.6	Analyze complaints.	4
1.5.7	Prepare complaint-related credit notes.	4
1.5.8	Enter complaint related credit notes in system.	4
1.5.9	Analyze bonuses/discounts	4
1.5.10	Prepare bonus/discount-related credit notes.	4
1.5.11	Enter bonus/discount-related credit notes in system.	4
1.5.12	Give recurring training.	4
2.1.		0
2.1.1	Inform suppliers about special reverse charge number to be used.	2
2.1.2	Update contractual terms.	3
2.1.3	Update procedure manuals.	3
2.1.4	Adapt IT systems.	3
2.1.5	Perform user-tests on system changes.	3
2.1.6	Give special training.	3
2.1.7	Identify new suppliers.	2
2.1.8	Negotiate contracts.	3
2.1.9	Collect supplier information.	2
2.1.10	Manage supplier information.	2
2.1.11	Give recurring training.	2
2.2.		0
2.2.1	Update procedure manuals.	3
2.2.2	Adapt IT systems	3
2.2.3	Perform user-tests on system changes.	3
2.2.4	Give special training.	3
2.2.5	Process purchase orders.	3
2.2.6	Approve purchase orders.	3
2.2.7	Record receipts of goods.	3
2.2.8	Give recurring training.	3
2.3.		0
2.3.1	Familiarization with new requirements.	3
2.3.2	Update contractual terms.	3
2.3.3	Update procedure manuals.	3
2.3.4	Set-up VAT codes in IT System.	3
2.3.5	Perform user-tests on system changes.	3
2.3.6	Give special training.	3
2.3.7	Maintain AP/PO vendor master file.	3
2.3.8	Audit invoices on VAT applied.	3
2.3.9	Input invoice data into AP system.	3
2.3.10	Process complaints and credit notes received.	3
2.3.11	Verify bonus/discount application and process credit notes.	3
2.3.12	Respond to supplier inquiries.	3
2.3.13	Give recurring training.	3
3.1.		0
3.1.1	Familiarization with requirements.	2
3.1.2	Obtaining an new VAT-number	2
3.2.		0

Nr	Activities	IO
3.2.1	Create new reports in system.	5
3.2.2	Perform user-tests on system changes.	5
3.2.3	Update procedure manuals.	5
3.2.4	Give special training.	5
3.2.5	Gather necessary information to create listing.	5
3.2.6	Create listing.	5
3.2.7	Submit listing for validation.	5
3.2.8	Validate purchase and sales listing.	5
3.2.9	Submit purchase and sales listing.	5
3.2.10	Give recurring training.	5
3.3.		0
3.3.1	Update contractual terms.	6
3.3.2	Update procedure manuals.	6
3.3.3	Create new reports in system.	6
3.3.4	Perform user-tests on system changes.	6
3.3.5	Give special training.	6
3.3.6	Gather relevant information to create VAT return	6
3.3.7	Prepare information to be reported.	6
3.3.8	Verify information to be reported.	6
3.3.9	Submit VAT return.	6
3.3.10	Give recurring training.	6
3.4.		0
3.4.1	Assist during / comply with tax inspections	8
3.4.2	Communicate with tax authorities in case of potential issues (e.g. asking for rulings / appeals)	8
3.4.3	Provide additional information requested by the tax authorities	8

3.3 CASH FLOW IMPACT

Input sheet

General Hypothesis

Revenue

% Turnover impacted by VAT	100%	(exclude international trade, etc.)
Average VAT Rate	21%	
% Impacted by Reverse VAT	100%	(transactions > 5000€)

Cost

% Cost Impacted	100%	
Average VAT Rate	21%	
% Impacted by Reverse VAT	100%	(transactions > 5000€)

Term of payment

Clients - DSO	30	(days)
Suppliers - DPO	60	(days)
Year	360	days
Years	12	months

VAT Statement Cycle

	1 yes ; 0 no	periodicity
Jan	1	1
Feb	1	1
Mar	1	1
Apr	1	1
May	1	1
Jun	1	1
Jul	1	1
Aug	1	1
Sep	1	1
Oct	1	1
Nov	1	1
Dec	1	1
dec/01	1	1

VAT Payment Terms

VAT Receivable	30	(days, input multiples of 30)
VAT Payable	30	(days, input multiples of 30)

Financing Cost

Euribor	5,00%	1 month euribor rate

Input (k€)	dec/01	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Revenue (excl. VAT)	100	100	100	100	100	100	100	100	100	100	100	100	100
Cost (excl. VAT)	100	100	100	100	100	100	100	100	100	100	100	100	100

Calculation sheet

k€	0	1	2	3	4	5	6	7	8	9	10	11	12
Input	dec/01	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Revenue (excl. VAT)	100	100	100	100	100	100	100	100	100	100	100	100	100
Cost (excl. VAT)	100	100	100	100	100	100	100	100	100	100	100	100	100
Receivables													
Trade Receivables	121	121	121	121	121	121	121	121	121	121	121	121	121
VAT Receivables MoM	21	21	21	21	21	21	21	21	21	21	21	21	21
VAT Cumulative	21	42	42	42	42	42	42	42	42	42	42	42	42
Trigger VAT Payroll	1	1	1	1	1	1	1	1	1	1	1	1	1
VAT Receivables	21	21	21	21	21	21	21	21	21	21	21	21	21
Payables													
Trade Payables	242	242	242	242	242	242	242	242	242	242	242	242	242
VAT Payables MoM	21	21	21	21	21	21	21	21	21	21	21	21	21
VAT Cumulative	21	42	42	42	42	42	42	42	42	42	42	42	42
Trigger VAT Payroll	1	1	1	1	1	1	1	1	1	1	1	1	1
VAT Payables	21	21	21	21	21	21	21	21	21	21	21	21	21
Net Result													
Total Net Position (100%)		-121	-121	-121	-121	-121	-121	-121	-121	-121	-121	-121	-121
Net Position Trade AR/AP (incl.)		-121	-121	-121	-121	-121	-121	-121	-121	-121	-121	-121	-121
Net Position Trade AR/AP (ex.)		-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
Net VAT Position		-21	-21	-21	-21	-21	-21	-21	-21	-21	-21	-21	-21

Benefit (+) / Cost (-) of new VAT Rev. Charge	-1,050	k€

Appendix 4 - Information obligations for the different scenarios

Ref.	VAT Information Obligation	Abbreviation	As is scenario "Traditional" VAT system (Sample Member States: UK, Hungary)	As is scenario Reverse charge for non-established businesses (Sample Member States: Belgium, The Netherlands)	To be scenario 1	To be scenario 2
1.	Obligation to register for VAT	VAT registration	✓	Depends on the situation	✓	✓
2.	Obligation to obtain a special reverse charge VAT number in order to apply the reverse charge	Reverse Charge number			✓	✓
3.	Obligation to book the invoices in a purchase ledger	Booking purchase invoices	✓	✓	✓	✓
4.	Obligation to issue compliant invoices and obligation to book the invoices in a sales ledger	Issuing/Booking sales invoices	✓	✓	Including the new special reverse charge VAT number of the customer. The supplier is obliged to verify the special reverse charge VAT number of the customer.	Including the new special reverse charge VAT number of the customer. The supplier is obliged to verify the special reverse charge VAT number of the customer.
5.	Obligation to file a general purchase and sales listing electronically	General purchase and sales listing		Yearly sales listing for Belgium	On a daily basis, mentioning for each invoice subject to the reverse charge individually: . VAT number of the supplier . Special reverse charge VAT number of the customer . Invoice number . Invoice date . Taxable amount	On a monthly basis, mentioning the total amount of sales to each customer in respect of whom the reverse charge was applied: . VAT number of the supplier . Special reverse charge VAT number of the customer . Total taxable amount per customer per month
6.	Obligation to file periodic VAT returns	VAT returns	✓	✓	Including purchases subject to reverse charge	Including purchases subject to reverse charge
7.	Obligation to file quarterly intra-Community sales listings	intra-Community sales listing	✓	✓	✓	✓
8.	Obligation to cooperate with periodic VAT inspections	VAT inspections	✓	✓	✓	✓

Appendix 5 - Statistical analysis

An important concept of statistics and estimation is that the best estimator of an (unknown) population average is the (known) average of any sample of this population. Intuitively, we can understand that we could take several samples and find out very different figures as an average of these samples. This is why, if we are looking at the results of a single sample, we should take into account what is called the sampling error to find a figure we can rely on at a certain confidence level[12].

The sampling error (SE) is computed as:

$$SE = \frac{z \times \sigma}{\sqrt{n}}$$

Where:

- N is the sample size,
- Sigma is the standard deviation of the population (which is replaced with the standard deviation of the sample, because it is the best estimate of the unknown standard deviation of the population) and
- Z is a value from the standardised normal distribution corresponding to the desired confidence level.

In the table on the next page we have calculated, as an example, a one-tailed confidence interval at 80%, which corresponds to an upper bound cost figure, below which we are 80% confident of finding the average value of any sample taken from the population. This upper bound is made up by the sum of the average of the sample and the related sampling error. It is important to underline that the application of the sampling error formulae noted above relies on the assumption that the sample is large enough (usually at least 50 items), and is therefore inaccurate given the present limited sample size. The figures therefore have to be seen as an illustration of the statistical analysis that could be performed on a larger sample size.

However, because the sampling error is based on the standard deviation of our sample, the figures reveal the degree of variance in a sample. In addition, these numbers can serve as a benchmark for possible further statistical analysis.

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[12] Mathematical Statistics with Applications, Wackerly, Mendenhall and Scheaffer, Duxbury (Chapter 8: estimation)

Values at 80% confidence level Z-value of 0.84[13]	One-time cost in EUR		Recurring cost in EUR	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Small and Medium Sized – 5 observations (excl. 1 outlier)				
Upper bound	11,246	11,260	6,230	2,780
Average	*7,345*	*7,363*	*4,425*	*2,163*
Sample Error	*3,902*	*3,896*	*1,804*	*617*
Large – 10 observations (excl. 4 outliers)				
Upper bound	324,488	376,408	98,284	59,446
Average	*261,357*	*299,984*	*72,473*	*43,012*
Sample Error	*63,131*	*76,425*	*25,811*	*16,434*
Total Sample – 15 observations (excl. 5 outliers)				
Upper bound	178,144	205,987	53,830	32,396
Average	*132,515*	*151,833*	*37,343*	*22,047*
Sample Error	*45,629*	*54,154*	*16,488*	*10,349*

The numbers in the table above are best illustrated using an example. The upper bound for small and medium sized companies in scenario 1 is equal to EUR 11,246. The meaning of this number is as follows: the maximum average cost that we would expect small and medium sized companies to incur, on the basis of the sample observed, amounts to EUR 11,246 at a confidence level of 80%.

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[13] Mathematical Statistics with Applications, Wackerly, Mendenhall and Scheaffer, Duxbury (Chapter 8: estimation)