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COMBATING VAT FRAUD IN THE EU

Ljubljana, September 2015 POLONA MUHOVIC

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INTRODUCTION

Value added tax (hereinafter: the VAT) fraud in Europe has been escalating intensively, expanding in its quantity and improving its levels of sophistication. It is a major concern for the member states of the European Union (hereinafter: the EU) and poses a threat to society in general. It is difficult to assess absolute levels of VAT losses it causes. However, an approximate estimation indicates that the amount of VAT gap was EUR 193 billion in 2011 for all member states (CASE & CPB, 2013, p. 29). VAT fraud reflects the systematic weaknesses of the transitional system which have allowed cross-border VAT-free purchasing of goods and services (European Commission, 2010c, p. 7), allowing the VAT system being susceptible to fraud, especially to "missing trader" intra-Community (hereinafter: the MTIC) fraud or so-called "carousel fraud". Carousel fraud has a far more serious impact on some EU member states (hereinafter: the member states) than others as not all states have the same VAT regulations. For example, fraud draws more funds in those member states with a higher tax rate. Member states are fighting hard to put an end to this activity. However, regardless of their efforts, VAT fraud has rapidly been developing into a well-established commerce. New sophisticated and innovative forms of fraud are being constantly developed. In order to address these issues, several member states have already started to introduce their own individual solutions, such as applying a generalised reverse charge to domestic business transactions and a reverse charge to supplies of goods and services by non-established suppliers. By implementing these measures, the application of the tax was efficiently shifted to the retail stage. Some member states have confined their scope simply to specific supplies of goods and services, which are more sensitive to such fraud. It seems however, that up until now, efforts of member states in order to limit fraud have lacked coordination, crucial for combating VAT fraud on a scale large as EU market. With no appropriate coordination and consistency, implementation of such means of control cannot be efficient and will furthermore, negatively interfere with legitimate traders. Last, but not least, it places Europe's competitiveness as a unity under a handicap (International VAT Association, 2007, p. 4). Not only does carousel fraud steal national revenues of member states and therefore deprives the budget of the European Economic Community, it also distorts competition in the targeted market sectors. VAT evasion allows the prices of the products offered by fraudsters to be lower than those in a law-abiding market. Consequently, new traders encounter more difficulties when entering the market and previously established traders find it harder to stay in the market. Employment and economic growth are therefore both negatively affected by consequences of carousel fraud (European Commission, 2006c, p. 7).

The purpose of this thesis is to address and analyse possible solutions to tackling the problem of VAT fraud in the EU by considering their respective advantages and disadvantages. MTIC fraud or carousel fraud will be analysed in greater detail. How carousel fraud operates will be described and its indicators will stress the need for companies, law enforcement agencies and tax authorities to be aware in order to prevent the risk of being involved in a fraud and to react immediately to prevent it. The thesis is intended for readers with merely a basic level of knowledge about value-added tax. To support their comprehension, the initial part of the thesis will therefore present the basic terminology of the issues being addressed.

The thesis adopts a business research and a descriptive approach. The nature of the research methods involves description, classification and compilation. The thesis is based on the examining the relevant Directives, regulations and EU legislation. Information is obtained primarily from Organisation for Economic Cooperation and Development (hereinafter: the OECD) and European Commission (hereinafter: the Commission) preparatory works and reports, European Court of Justice (hereinafter: the ECJ) case law, and legal and economic articles selected from recognised periodicals such as the National Tax Journal, the Journal of Financial Crime, The Economist and the Tax Law Review. The research methodology is based on primary sources. Secondary sources are only employed if the primary source was unattainable or unavailable in either English or Slovenian. When a secondary source is used, it is explicitly stated.

Following the introduction, specific relevant principles and terminology used by the VAT Directive, the Treaty Establishing the European Community (hereinafter: the EC-Treaty) and the ECJ will be described and explained in the first chapter. They are important in order to comprehend the subsequent analysis. Furthermore, the historical development of the VAT system and Council regulations will be briefly presented, along with the VAT information exchange system. The second chapter will explain several types of VAT fraud member states and companies may encounter. In the third chapter, some statistical data on member states' VAT rates and the VAT gap are given. The following chapter deals with a type of VAT fraud that is a significant concern in the EU and hence demands considerable attention, namely MTIC fraud or so-called carousel fraud. The general scheme and operation of organised groups of fraudsters and, in addition, the way they may launder money from other criminal activities are shown. This chapter also describes how the right to deduct is administered in a carousel fraud case based on the ECJ judgements on three interesting cases, which are pertinent as they present a complete legal investigation and indicate the risks and liabilities of third parties, as well, knowingly or not, who are involved in carousel fraud. Finally, possible solutions in the fight against VAT fraud will be outlined in the last chapter along with their advantages and disadvantages as seen from different points of view. In the conclusion, final remarks are offered.

1 VAT LEGISLATION WITHIN THE EU

Consolidated version of the Treaty on the Functioning of the European Union (Official Journal of the European Union, C 115/47; hereinafter: the TFEU), under Article 113, provides that within the EU, the Council adopts provision concerning turnover taxes like VAT. Under Article 289 of the TFEU, such provisions have to be unanimously adopted after consulting the European Parliament and the Economic and Social Committee. The adoption of any provision requires a proposal from the Commission, which has the right of initiative.

The Council can make amendments to a Commission proposal. Where these changes do not achieve the aims of the proposal or go beyond those aims, the Commission's only option is to withdraw its proposal (European Commission, 2010c, p. 52).

While the TFEU prescribes no particular legal instrument, VAT has chiefly been regulated through directives. Under Article 288 of the TFEU, a directive binds each member state to which it is addressed, but leaves the choice of form and methods to the national authorities, which transpose it into the national legislation.

The Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax (Official Journal of the European Union, L 347/1; hereinafter: the VAT Directive) establishes the common system of VAT and in it the Council has also reserved for itself the power to adopt implementing regulations. In its very nature, under Article 290 of the TFEU, this procedure is limited in scope and may not be used to amend the VAT Directive. Since no powers have been delegated to the Commission, all substantive changes therefore need to go through the normal legislative procedure, requiring unanimous adoption by the Council.

1.1 Basic Principles and Terminology

1.1.1 VAT

Value added is the difference between the value of goods produced and the cost of materials and supplies used in producing them. In a EUR 1 loaf of bread embodying EUR 0.60 worth of wheat and other materials, the value added is EUR 0.40. Value added consists of the wages, interest and profit components added to the output by a firm or industry (Samuelson, & Nordhaus, 1995, p. 764).

VAT is a charge levied on a firm as a percentage of its value added (Samuelson, & Nordhaus, 1995, p. 764). In a VAT system, taxes are collected at each stage of production. Accordingly, for a loaf of bread, VAT is collected from the farmer for the wheat production, from the miller for the flour production, from the baker in the dough stage, and from the grocer in the delivered-loaf stage. In fact, VAT is essentially the same as a sales tax because it is levied on the sum of labour, interest and other elements of value added and so it is really a tax on total final sales. From time to time, the idea of VAT becomes popular in the United States of America (hereinafter: the United States) as a way of raising additional revenues. It is appealing for the reason that it is a tax on consumption and many economists believe the United States should boost savings by altering its tax structure towards one based on consumption and away from one based on income. In addition, countries heavily involved in international trade may desire to harmonise their fiscal systems with those of European and other countries that rely on significant VAT. The overall assessment of VAT for the United States depends on the alternative. VAT has clearly been an efficient way to raise revenues and reduce the double taxation of saving. In contrast, replacing a progressive income tax with a regressive VAT would exacerbate the inequality of post-tax incomes (Samuelson, & Nordhaus, 1995, p. 309).

Looking at VAT adopted in the EU from an economic perspective, it is a consumption tax and is reimbursed at every production and distribution stage. However, a taxable trader is provided with an option of credit for tax paid on his purchases. By this, the tax is successfully implemented in taxation process of the final consumption of goods and services which are subject to taxation (van Brederode, 2008, p. 31).

1.1.2 Economic Activity

Under Article 9 of the VAT Directive, the term "economic activity" counts for all activities of producers, service providers or tradespersons, as well as activities of the professions, agricultural activities and mining. Furthermore, any use of tangible and intangible assets with an intention of acquiring profit is classified as an economic activity. It is necessary for an activity to be carried out independently in order for it to be classified as an activity of an "economic character".

However, employed and other persons involved in a lawfully established employer-employee relationship are excluded from the above mentioned condition, as specified by Article 10 of the VAT Directive.

1.1.3 Taxable Person

In accordance with Article 9 of the VAT Directive, an individual independently and autonomously carrying out any economic activity in any place, regardless of its intent or outcome, is classified as "taxable person".

Considering their transactions and activities in which they act as public authorities, even where they collect funds associated with those transactions and activities, as provided by Article 13 of the VAT Directive, the following bodies are not regarded as taxable persons: states, local and regional government authorities, as well as other bodies administrated by public law. Nonetheless, they may be treated as taxable persons in those transactions and activities in which being regarded as non-taxable persons could negatively affect competition.

With a view to avoid misinterpretation regarding terminology, the term taxable person defines a subject falling within the scope of VAT legislation; in some member states they are regarded as "taxpayers". Since the taxpayer is the subject who receives a taxable supply, perceived as a subject bearing the economic incidence of the tax, confusion may arise. When determining the amount of the direct tax on a supply, the latter is also applicable (Thuronyi, 1996, p. 175).

1.1.3.1 Taxable Transaction

The VAT Directive, by Articles 14 and 15, establishes that a taxable transaction comprises of the following: the supply of goods, intra-Community acquisition of goods and the supply of services. The former denotes the transference of the right to dispose of tangible assets as an owner. Electricity, gas, heat and similar also belong to the category of tangible property. The transaction becomes taxable when the proprietary rights of goods are transferred to another person. Nonetheless, the supply ought to be a supply for consideration, as stated by Article 2 of the VAT Directive. Apart from a wide range of goods, a taxable transaction also includes services. Everything that does not consist of supply of goods is categorised as service, as specified by Article 24 of the VAT Directive.

Under Article 20 of the VAT Directive, the acquisition of the right to dispose tangible assets as an owner stands for the intra-Community acquisition of goods. However, this is applicable if the owner or the seller supplies goods to the taxable person outside of the member state in which the dispatch began. In order to enable carousel fraud, an indispensable precondition must be absolutely met. It is the zero-rated intra-Community acquisition. If the purchaser is registered and situated for VAT in another member state, the seller can make a VAT-exempt supply, as provided by Article 138 of the VAT Directive. In accordance with Article 2 of the VAT Directive, the VAT tariff levied on the goods is to be paid to the tax authorities in the purchaser's member state and by the purchaser. In cases where the purchaser does not pay the VAT or has gone missing, their member state suffers loss of the VAT income on the supply.

1.1.4 General Principles

1.1.4.1 VAT Directive

Taking into account the VAT regulations, under Article 1, the VAT Directive provides the member states with the following two related principles. Namely, the principle of the taxation of value-added, which suggests that solely value added is to be taxed and the principle of reciprocity, which implies that the output VAT for the seller and the input VAT for the purchaser are to be equivalent, as stated by Article 7 of the VAT Directive. Furthermore, the latter also specifies that when the deductible tax becomes chargeable, the right to deduct becomes available, as provided by Article 168 of the VAT Directive.

1.1.4.2 The Origin Principle versus the Destination Principle

The traditional approach to cross-border trade is that VAT can only be taxed according to one of two jurisdictional principles, namely the origin principle or destination principle.

Simply stated, the *origin principle* states that a good is taxed where it is produced, while the *destination principle* states it is taxed where it is consumed. An important aspect of these principles is tax allocation. According to the origin principle, the tax should accrue to the country of production, while according to the destination principle the tax should accrue to the country of consumption (van Brederode, 2009, p. 205).

1.1.4.3 Case Law

Taxpayers must be able to easily recognise and understand their rights and obligations which arise from tax legislation. The *principle of legal certainty* demands that the legislation ought to be presented in an exact and transparent manner (Judgement of the Court (Third Chamber) on 9 July 1981 in Case 169/80, n.d., p. 1931). Furthermore, it implicates that the rights and obligations of a taxable person must not be subject to any eventualities, occurrences and facts that arise subsequently to the tax authority making a decision regarding those rights and obligations (Judgement of the Court (Fifth Chamber) on 29 February 1996 in Case C-110/94, n.d., p. I-877). A taxable person should not be penalised if they act in accordance with the law. Therefore, the legislation ought to be accurate and precise. The principle of legal certainty is quite significant in ECJ case law. However, it is not specifically regulated in the EC-Treaty (Usher, 1998, p. 65).

The *principle of equality*, a fundamental principle, specifies that comparable and resembling cases and situations should be approached and dealt with in an equal manner. Exemptions are situations in which differentiation can be properly established (Judgement of the Court (Third Chamber) on 12 March 1987 in Case C-215/85, n.d., p. 1300).

The *principles of neutrality* and *fiscal neutrality* are the two neutrality principles. The *principle of neutrality* specifies that despite of the length of the distribution and production chains, in all member states, goods that are similar ought to be charged with the same tax burden. According to the *principle of fiscal neutrality*, all economic activities must be neutrally burdened by tax. Competing goods that are similar ought to be handled equally in view of VAT purposes (Judgement of the Court (Sixth Chamber) on 3 May 2001 in Case C-481/98, n.d., p. I-3369). Regarding the levying of tax, economic traders that supply similar goods must be treated equally (Judgement of the Court on 7 September 1999 in Case C-216, n.d., p. I-4975). Ultimately, an economic decision should not in any way be influenced by tax factors.

When interpreting the case law, the *principle of proportionality* is of great significance, implying that activities practiced by member states must not exceed the requirements needed in order for them to accomplish the wanted objective as provided by Article 5 of the VAT Directive.

1.2 History of the VAT System

In 1967, when the First and Second VAT Directives were adopted, the Council made a political and legal commitment as part of the EC-Treaty's objective to create the most efficient common market possible, characterised by healthy competition similar to a domestic market. It aimed to set up a common VAT system, which would not distort competition conditions or impede the free movement of goods and services in the common market. Accordingly, it sought to abolish the taxation of imported and the non-taxation of exported goods in trade within the then EEC. The Council reaffirmed its commitment when the Sixth VAT Directive replaced the Second VAT Directive in 1977 (Value Added Tax, 2011).

When the European Community was established, the initial six member states applied diverse types of indirect taxation, mostly cascade taxes[1]. Upon the decision to finance the EEC Budget from the community's own resources, which were to include payments based partly on the VAT collected by the member states, the drawbacks of these cascading taxes became evident (Value Added Tax, 2011). With cascade taxes, it was not possible to determine the actual amount of tax contained in the final price of a specific product. This resulted in a constant threat that, in order to subsidise their exports, member states would purposely, or incidentally overestimate the taxes refundable on exportation. In order to achieve an efficient single EU market, the former indirect taxes had to be eliminated and substituted by a transparent turnover tax system that guaranteed neutral taxation and allowed a refund of the precise amount of tax at export (European Commission, n.d.-b).

All member states had replaced their various turnover taxes with a non-cumulative, multi-stage turnover tax – VAT in the early 1970s. Only the VAT system's general framework was set out by the first two VAT Directives and the decision regarding the coverage of VAT together with the rate structure belonged to the member states. In financing the EU budget it was important that the member states had a "common rate of tax on a basis of assessment determined in a uniform manner according to community rules". Hence, the main objective of the promulgation and subsequent enactment of the Sixth Directive was to establish a common VAT system with a uniform coverage so that the member states would levy VAT on the same transactions (Value Added Tax, 2011).

The next big step to create a harmonised VAT system came on 1 January 1993 when all controls at fiscal frontiers within the EU were abolished. In order to fully realise the single market, the Commission proposed to replace the "destination-based" VAT system mainly in place until 1993 with an origin-based VAT system. However, this proposal was considered unacceptable since the member states' VAT rates varied greatly. Further, there were concerns about being able to find a suitable method to reallocate VAT receipts to reflect actual consumption. While waiting for the right conditions to implement the

[1] A *cascade tax* is a tax where no credit is given to traders for tax paid on the purchase of their inputs. Such a tax is therefor a multi-stage cumulative tax. Here lies the difference with VAT which is a non-cumulative tax.

"origin-based" VAT system, the European Community adopted the transitional VAT system for a limited period of four years (European Commission, n.d.-b).

The transitional VAT system is a "destination-based" system where intra-Community supplies of goods between taxable persons are not subject to VAT in the member state in which goods originate. Instead, goods are taxed at the rate and condition in force in the member state of destination. Without frontier controls, this system manages to maintain the diverse fiscal systems found in the EU. However, the European Community does not regard this as a long-term solution. The intention is still to eventually switch to a VAT system which is origin-based and the VAT is charged by the supplier of goods (European Commission, 2004, p. 3).

Yet it was very soon clear, like in 1987, that the degree of harmonisation required by the origin system, particularly regarding the level and structure of rates, could not be ensured due to the member states' varying domestic arrangements. Consequently, the Council hardly made any progress regarding the 1996 programme proposed by the Commission, despite it having been accepted that the transitional arrangements involved several shortcomings. They were complicated, susceptible to fraud and did not help achieve the objectives of the internal market (European Commission, 2010c, p. 6).

Accordingly, in 2000 the Commission presented a communication setting out its strategic programme for improving how the VAT system operated in the single market. The strategy had four core objectives – simplifying and modernising the existing rules, applying them more uniformly and enhancing administrative cooperation – and a pragmatic programme of action for achieving them. In the meanwhile, a new regulation enhanced administrative cooperation on cross-border transactions. Unfortunately, no agreement was reached on other proposals to reduce the administrative burdens on intra-EU supplies, like a single threshold for distance sales and the introduction of a generalised one-stop-shop for non-established taxable persons[2], extending to business-to-customer (hereinafter: the B2C) transactions, in particular distance sales, and to business-to-business (hereinafter: the B2B) supplies not subject to a "reverse charge". These involved a shift away from the principle of taxation at origin towards taxation in the country of destination (i.e. of establishment of the customer or of consumption, with either the administrative obligations met at a distance or the increased use of reverse charge and greater cooperation between tax authorities). They were confirmed when the "VAT package" was adopted in 2008 (European Commission, 2010c, pp. 6 and 7).

The Eighth VAT Directive, namely the Council Directive 2006/112/EC of 28 November 2006 on the common system of VAT, came into force January 1, 2007, replacing the Sixth VAT Directive. Not only it brings all the previous provisions together within a single piece

[2]A non-established taxable person is a person who is not normally a resident of a particular member state does not have a place of business in this member state, is not incorporated under this member state's law, but makes taxable supplies in this member state (VAT basics for consumers, 2011).

of legislation, the Eighth VAT Directive ensures that all member states contribute a proportion of VAT to the Community's resources. However, despite the objectives already included in the Sixth Directive, due to the vast number of exceptions and derogations allowed from the standard VAT coverage there is still no complete uniformity concerning VAT coverage among the member states. Moreover, regarding the VAT rates, the Community simply set out standard VAT rates from 15% to 25% that all member states shall apply, with the latest figures of the highest rate at 27%. The outcome is that VAT rates continue to vary across the Community (European Commission, n.d.-b).

As with January 1, 2010, supplies of services to taxable persons and non-taxable legal persons identified for VAT purposes are in principle taxed in the member state where the customer is established, with a reverse charge applying in case that the supplier is not founded in the same state (European Commission, 2010c, p. 7).

The current rules for taxation in the member state of residence of private individuals receiving electronic services that are supplied by non-EU established companies, and the corresponding online one-stop-shop, starting from 2015 are extended to telecommunications and services broadcasting television and radio and to the same services provided by EU companies. Means for a more intense cooperation among member states of consumption and of establishment are also provided for with the possibility for the former to require the latter to hold an administrative enquiry or in any event to obtain minimum information (European Commission, 2010c, p. 7).

1.2.1 Vat Fraud

In the meanwhile, VAT fraud had expanded as a result of the systemic weaknesses of the transitional system which permits cross-border VAT-free purchases of goods and services. This has been the Commission's and the member states' significant concern. A Communication was presented by the Commission in 2006, calling for the establishment of a harmonized strategy in order to improve the fight against fiscal fraud. The ensuing debate concentrated on reinforcing the existing VAT system as well as the possibility of bringing forward a general reverse charge system or for the taxation of intra-EU supplies. The Commission issued a Communication in 2008, analysing these latter, more far-reaching options. In particular, it contemplated the option of replacing the exemption of intra-EU supplies of goods with a system of taxation at a flat rate of 15%. Here, the arrival member state would collect the additional VAT from the customer to achieve the applicable rate or refund the VAT paid in excess. This would be combined with a redistribution mechanism between member states based on monthly recapitulative statements, although the Council did not invite the Commission to further develop these concepts. Since there was no political arrangement concerning the more comprehensive measures, attention was paid to more conventional measures to bolster the traditional approaches in combating VAT fraud. Therefore, a short-term action plan was presented by the Commission, comprising a range of measures. Since then, all of the legislative proposals so announced have been presented and all except one have been adopted by the Council, notably the Commission's proposal to cut the deadlines for submitting and transmitting recapitulative statements of supplies of goods and tightening up the conditions for exemptions on importation followed by an intra-EU supply. This short-term action plan was completed by the adoption of a reworked new Council Regulation on administrative cooperation and combating fraud in the field of VAT, providing the legal basis for setting up Eurofisc, which is explained in subchapter 1.4.3 (European Commission, 2010c, pp. 7 and 8).

1.3 Right of deduction

1.3.1 Deduction in general

The consumption tax becomes a VAT by virtue of any purchaser being able to deduct input tax charged to them by any seller. The basis of VAT is made up of the deduction of input VAT by non-consumers, with output VAT for the taxable seller becoming a deductible input VAT for the taxable purchaser in the following stage in the chain, until the goods reach the final consumer. This means that any VAT registered company (a taxable person) adds up all the VAT they are charged by their suppliers (VAT inputs) either within their own member state or the EU (intra-community). Then they add up all the VAT they have charged their customers (the amount of tax they are liable for in respect of their supplies) and net the two amounts off simply paying the difference to the tax authorities. Simply put, this is done by netting off the input tax from the output tax and paying the balance over to the treasury. In cases with excess input VAT, it is possible to obtain a refund. However, the latter is determined by specific requirements. Through periodical VAT return, the right of deduction is conducted. By not being able to deduct input VAT, the taxable seller would be impacted by a selling cost. However, the selling cost should be applicable to the final consumer. When the deductible tax becomes chargeable, the right of deduction can be put into practice (van Bael, & Bellis, 2003, p. 208).

The rights to deduct VAT and to recover a refund are both recognised by the VAT Directive, namely by Articles 168-172, which determine that, in a way, they are practically the same as they are both associated with the opportunity to recover input VAT. Entitled to claim a refund is the taxable person not stationed in the EU or stationed in another member state. One can also claim a refund in case the input VAT surpasses the output VAT. Correspondingly, if the output VAT does not rise above the input VAT or if it is non-existent, it will in fact emerge as a refund (van Bael, & Bellis, 2003, p. 209).

1.3.2 General Conditions

Under Article 167 of the VAT Directive, the right to deduct emerges when the deductible tax applies as chargeable. A taxable person must meet specific criteria in order to carry out their demand for input VAT deduction. Provided, by Article 168 of the VAT Directive, that the goods are used for taxable transactions, a taxable person is entitled to deduct input

VAT associated with supplies of goods and services, intra-Community obtainment of goods and imports of goods to those member states in which the transactions take place. The supplies may be sourced from the trader's own member state, other member state or even from goods imported from outside the EU. The trader may only claim an input tax deduction on condition that the deduction is related to goods in making sales in the course of that trader's business.

According to the ECJ and referring to the taxable person's right of deduction, a specific input transaction and a specific output transaction must be directly linked in order for the taxable person to be accredited with input VAT deduction (Judgement of the Court (Second Chamber) on 8 June 2000 in Case C-98/98, n.d., p. 4210; Judgement of the Court (Fifth Chamber) on 22 February 2001 in Case C-408/98, n.d., p. I-1388). Without the direct link, the input VAT deduction is not possible for the taxable person. Furthermore, the taxable person must be able to verify that they have met the conditions for deduction (Judgement of the Court (Second Chamber) on 14 February 1985 in Case C-268/83, n.d., p. 665). If the above terms and conditions are not met, the entitlement for deduction is unattainable.

Under Article 178 of the VAT Directive, a taxable person is obliged to meet particular standards in order to put their right of deduction into use. Generally, the right to deduct is validated by an invoice designed accordingly to the VAT directive. Where a trader purchases goods or services from outside his own state but within the EU the trader must show on his VAT return the details of that transaction and keep a copy of the invoice regarding that purchase as decreed by the VAT Directive. The taxable trader deducts this input tax in the same manner as he deducts other input tax from the total of VAT he has charged his customers in the VAT period, under Article 179 of the VAT Directive. Nevertheless, to be able to deduct VAT during a specific tax period, two conditions must be met. Firstly, the delivery of goods must have taken place. Secondly, an invoice or a written agreement equal to an invoice authorised by a member state must be obtained by the taxable person (Judgement of the Court (Fifth Chamber) on 29 April 2004 in Case C-152/02, n.d., pp. I-5610 and I-5611). In cases where, in a particular tax period, deduction is greater than VAT, the member state can, either choose to transfer the excess to the following period or make a refund. The member state may also decline that refund or a forward transfer in case of an unsubstantial amount, as provided by Article 183 of the VAT Directive.

1.3.3 Restrictions

In cases where goods are used both in transactions with deductible VAT and in those with non-deductible VAT, solely the VAT in transactions with deductible VAT may be deducted as determined by Article 173 of the VAT Directive.

Consistently with the Commission, the Council determines which expenditures are not entitled to VAT deduction. These exclusions are stated by Article 176 of the VAT Directive, and include luxuries, entertainment, amusements and similar expenses that hold no strict business character shall not be subject to VAT deduction. However, until the above stated principles take effect, the member states can withhold the exclusions defined in their national law. Due to cyclical economic reasons, member states can rule out certain goods from the deduction system. However, prior to doing so, the VAT committee must be consulted as stated by Article 177 of the VAT Directive. Member states are given these time-limited measures in order for them to be able to deal with transitory conditions in its economy (Judgement of the Court (Fifth Chamber) on 8 January 2002 in Case C-409/99, n.d., p. I-124).

Prior to their definite approval of arrangements, member states can administer certain derogations as provided by Articles 370-396 of the VAT Directive. Different rules may apply and they are determined by whether the member state joined the EU prior to or following the year 1978. The above mentioned derogations will not be discoursed any further as they go beyond the domain of the thesis.

In reference to ECJ case law (Judgement of the Court (Fifth Chamber) on 8 January 2002 in Case C-409/99, n.d., p. I-81), restraints on the right to deduct should be adopted uniformly in all member states due to the fact, that such limitations influence the extent of tax burden. Derogations are permitted solely when explicitly provided in the VAT Directive.

1.4 Council Regulations on Administrative Cooperation and Combating VAT Fraud

Council Regulation (EC) No 904/2010 of 7 October 2010 on administrative cooperation and combating fraud in the field of value added tax (Official Journal of the European Union, L 268/1; hereinafter: the Council Regulation) establishes common rules and procedures for administrative cooperation and data exchange between tax authorities in order to apply VAT properly and to combat fraud.

Council Regulation, under Article 1, sets out rules and procedures for cooperation and exchanges of information between member states' authorities responsible for applying VAT, with a view to:

- assessing VAT correctly;
- controlling the appropriate application of VAT;
- combating VAT fraud; and
- protecting VAT revenue.

Under Article 2, the Council Regulation provides that each member state must appoint a single central liaison office as a contact point for cooperation with the Commission and other member states. They may also designate liaison departments or tax officials for direct exchanges of information. The liaison departments and tax officials must notify their central liaison office of any requests or replies to requests for assistance they send or receive. If a request lies outside of their territorial or operational area, it must be handed over to the central liaison office.

1.4.1 Exchanging information

Under Article 10 of the Council Regulation, the requesting authority sends **requests for information and for administrative enquiries** to the authority receiving the request using a standard form. The latter must provide the information with no delay and at the latest three months after the receiving date of the request. If the respective authority already possesses the information asked for, it must send it the latest one month after the date of receiving the request.

Without the need for any prior requests, as stated by Article 13 of the Council Regulation, the tax authorities must **automatically** provide each other with certain categories of information using a standard form when:

- information from the member state of origin is essential for the control system of the member state of destination where taxation will take place;
- there is reason to assume that violation of VAT legislation has been or will be committed in the member state of destination; or
- there is danger of tax loss in the member state of destination.

Pursuant to Article 15 of the Council Regulation, the tax authorities should **spontaneously** exchange any other necessary information not forwarded automatically. They may request feedback from the receiving authority on the information exchanged.

If the information received is in all likelihood going to be valuable to the tax authority of a third member state, the Council Regulation, under Article 50, determines, that the requesting authority may transmit it provided that it first informs the requested authority or, if required, obtains the permission of the requested authority.

Under Article 1 of the Council Regulation, information exchanges should be done electronically, as far as possible. Under Article 52, the Council Regulation determines that the **provision of information can be denied** if:

- the nature and quantity of requests within a specific period from the requesting authority overburden the administration;
- the usual sources of information have not been exhausted by the requesting authority;

- the laws and procedures of the requested member state do not permit the carrying out of the enquiry or the collection or use of the information;
- for legal reasons, the requesting member state cannot provide similar information; or
- it would cause exposure of an industrial, commercial or professional confidential information or it is against public policy.

For the purposes of exchanging information, and by arrangement between the requesting and requested authorities, under Article 28, the Council Regulation provides that officials of the former may be **present at the offices** of the latter and have access to copies of documents containing the information requested. These officials may also **participate in administrative enquiries** carried out in the requested member state. They may not, however, have the power to administer inspection conferred on the hosting officials. Member states can also decide to carry out **simultaneous controls**, as stated by Article 29 of the Council Regulation, if this is more efficient compared to controls carried out by a single member state. The Council Regulation, under Article 31, establishes specific provisions concerning the special scheme for non-established taxable persons, which supply non-taxable persons with electronic services.

1.4.2 Storing information

Under Articles 17-19 of the Council Regulation, each member state must store the below stated up-to-date information in an electronic system for a minimum of five years, starting with the end of the first calendar year in which access to it is granted, by automated means, to the other member states:

- information provided in the recapitulative statements submitted by taxable persons identified for VAT purposes;
- data on persons to whom the member state has issued a VAT identification number;
- data on VAT identification numbers that have become invalid; and
- information on non-established taxable persons.

1.4.3 Combating VAT fraud

Council Regulation, under Article 33, establishes a system of connections for a fast exchange of targeted information among member states (**Eurofisc**) to improve multilateral cooperation in combating VAT fraud. In this context, member states will set up a multilateral mechanism for early warning and arrange the operations of national Eurofisc officials acting on any warnings received.

1.4.4 Cooperating on VAT refunds

Apart from certain exceptions, pursuant to Article 48 of the Council Regulation, the tax authority of a member state address applications for VAT refunds it receives from taxable persons founded in another member state to the tax authorities of the member states of refund concerned. This must be done electronically no later than 15 days of receiving the application. The authorities of the member states of refund must electronically notify the authorities of other member states if they require additional electronic coded information on the nature and services of the applicants or if they require the applicants to provide a description of their business activities by using harmonised codes.

1.4.5 Cooperating with non-EU countries

So long as the assistance arrangements with the non-EU country in question permit it, in accordance with Article 50 of the Council Regulation, the tax authority of a member state forward information it has obtained from that country to member states that request it and to any other member state which may find it of interest. The tax authorities of member states can forward information to non-EU countries if the:

- the member state from where the information originates consents; and
- the non-EU country in question has agreed to cooperate in gathering evidence of irregular transactions that seem to contravene VAT legislation.

1.5 VIES

The VAT Information Exchange System (hereinafter: the VIES) plays an important role in the exchange of information on VAT regarding transactions within the EU. Tax supervision involving VIES is exercised via cooperation among the tax authorities of member states (Tax Administration of the Republic of Slovenia, n.d.).

The practice of keeping custom controls at internal EU borders, came to an end with the introduction of a single market on January 1, 1993. Instead, a new VAT control system for intra-Community was established. This strongly impacted companies by decreasing their administrative burden. Approximately 60 million customs documents per year were eliminated. In cases where supplies are made to a taxable person in another member state who will, upon arrival, account for the VAT, the intra-EU supplies of goods are cleared of VAT as stated by the new VAT system. A taxable person making these supplies should be provided with the possibility of a simple and prompt insight into data regarding their purchasers from other member states. This data includes, for example, their VAT identification number, issue date, name, address, VAT registration details of its traders etc. and is stored in an electronic database and managed by each tax authoritiy (European Commission, n.d.-a).

In order to ensure unobstructed flow of data held across the internal borders, an electronically automated system was established. VIES enables (European Commission, n.d.-a):

- companies an immediate access to the VAT numbers of their trading partners; and
- tax authorities to keep track of and supervise the course of intra-Community trade in order to check for inconsistencies.

The Central Liaison Office or the CLO in each member state is in charge of regulating and supervising intra-Community trade. Via VIES, it is provided with immediate access to the VAT registration database of other member states (European Commission, n.d.-a).

VIES is relevant for numerous reasons. To begin with, it is an instrument, which enables supervision of the validity of zero-rated claims in member states. Furthermore, it helps them to recognise intra-Community supplies that have been unreported. Last, but not least, the system provides member states with prompt validation of VAT registration numbers (VIES and Intrastat Traders Manual, 2011, p. 6). In cases of doubt, the validity of a customer's VAT number may easily be checked and verified with VIES. Each member state is obliged to gather data concerning trade with other member states from its intra-community suppliers. Consequently, all VAT registered traders who execute a zero-rated transaction of goods to a trader registered for VAT in a different member state are obliged to deliver a VIES statement including the sale's value. Detailed data regarding the trader's intra-Community supplies as well as the above mentioned statements ought to be submitted to each member state's tax authorities. The VIES statements must be delivered quarterly. If more suitable, larger companies are permitted to do so monthly and smaller companies yearly. However, the VIES does have a drawback. Its delay of some months is preventing an uninterrupted supervision of the quantities of different transactions (VIES and Intrastat Traders Manual, 2011, p. 9).

In intra-EU trade, the VAT number is of great significance. If a trader wishes to determine, whether or not, to opt for a VAT-exempt supply, they depend on the validity of their customer's VAT number. It is thus vital for the VAT number registry to be frequently updated, precise and consequently, reliable. Being inaccurately informed of the VAT status of their business partners, traders may incidentally find themselves in a situation where tax authorities require VAT recovery from them (European Commission, 2007, pp. 9 and 10). On that account, any after-effects of inaccurate information and out of date data contained in member states registers should be subject to responsibility of the member state. Timely removal of inactive VAT numbers of taxable persons that no longer engage in economic activities, and of those regarded as missing is an urgent step in updating the registries. By doing so, traders would be able to rely on them when making a decision whether or not to make a zero-rated supply (European Commission, 2007, p. 10). Even though the VIES is an efficient instrument in managing and controlling data on most of intra-Community transactions, it is not performing well entirely. Insufficient improvements have been made since its introduction. For those reasons, the Commission is contemplating transformation of the VIES into a VIES II which would enable member states to increase and intensify their control and supervision. VIES has proven to be inefficient in combating carousel fraud as it takes a minimum of three months after the transaction has been made for it to become evident and accessible to the member states. Such a long period permits carousel fraud in a way it allows fraudsters to disappear and elude sanctions. Furthermore, the complete VIES relies on data provided by taxable persons. Sanction measures for submission of incorrect and incomplete data and other irregularities regarding information delivery have so far been inadequate. Instead of the currently used VIES, the Commission aims to deliver a system that is more up to date, efficient, accurate and faster in providing information. In addition, the new system should also reduce expenses of taxable persons (European Commission, 2004, p. 10).

2 TYPES OF VAT FRAUD

VAT fraud occurs thousands of times a day in member states. Tax inconsistencies or fraud can take different forms. Below are some examples of fraudulent tax practices. The way these practices are carried out may be determined by the EU legislation in effect at a given time. Various types of fraudulent practices have developed following introduction of the Sixth Revised EU Directive that came into effect on 1 January 1993 (Aronowitz, Laagland, & Paulides, 1996, p. 7). Some types of VAT fraud are mentioned below.

2.1 Failure to register

VAT registration is compulsory if trader's turnover surpasses a set threshold. Below that level it is voluntary. However, farmers, government departments and other bodies may still be required to register so that an account is made of their transactions with suppliers outside the member state. It is prohibited to charge VAT for traders practicing exempt economic activities (VAT Registration FAQs, 2011).

Taxable persons who are in business and either making or intending to make taxable supplies, relevant EC acquisitions, distance sales or supplies of certain assets may be liable or entitled to register for VAT. A person required to register for VAT but deliberately does not register is committing a fraud (What is VAT fraud? Examples of different types of VAT fraud, 2011).

Usually, this applies to rather small companies, which operate near the level of turnover that makes the registration obligatory but omit it entirely. In doing so, they avoid the VAT otherwise fully chargeable as well as VAT compliance costs. This is most likely to be practised by traders or unregistered companies that sell directly to final consumers. Such traders are referred to as "ghosts" and are completely unknown to authorities that collect taxes (Keen, & Smith, 2007, p. 8).

Furthermore, numerous member states need to deal with individuals who provide their services free of tax, oftentimes using and purchasing inputs from their own business. Even though their turnovers exceed the VAT registration threshold, they intentionally avoid it. The most prevailing examples of such VAT-free services are hairdressing, painting, plumbing etc. and are commonly referred to as “shadow economy” fraud (Cnossen, 2010, p. 52).

2.2 The black economy

The black economy is a vast and a perplexed segment of the economy, generally characterised by a complete VAT avoidance via unrecorded private cash transactions. In some member states, the black economy is suspected to represent as much as 30% of their GDP (International VAT Association, 2007, p. 7).

2.3 Suppression

The aim of suppressing sales is to reduce one’s true tax liability. This is the simplest form of VAT fraud. The taxable person will suppress their sales, as well as usually their corresponding purchases, and declare lower VAT figures in both their internal records and on their VAT return. They might also decide to suppress all of their taxable income in order to avoid becoming registered for VAT (European Union Committee, 2004).

Any companies can undertake suppression (What is VAT fraud? Examples of different types of VAT fraud, 2011):

- cash traders;
- companies acquiring goods; and
- service providers etc.

In cases where traders and companies fail to declare all their sales (sales understating) or claim input tax on purchases that were invented (inflating claims) or use goods or services for personal purpose rather than creating sales for the business (consuming through the company) then this is considered a fraud (Cnossen, 2010, p. 52).

2.4 Deliberate insolvency

Some legitimate companies that are engaged solely in their domestic market purchase taxable goods and sell them at increased values and thus providing high tax credits to purchasers. However, this may later on result in their insolvency without paying their VAT liabilities (Cnossen, 2010, p. 52). If a company conducts its insolvency deliberately, in order to avoid paying the VAT to the authorities, is committing a fraud.

This is where, for example, a supplier charges VAT and the trader pays the supplier and deducts the input tax. Unknown to this innocent trader is the fact that his supplier is insolvent, cannot pay his bills and never pays tax he has charged the trader over to the Treasury (International VAT Association, 2007, p. 7).

2.5 False invoicing

A VAT invoice is used as evidence of the receipt or supply of goods or services. Tax inspectors should always ensure that any invoices are legitimate. Indicators that invoices might be false include, but are not limited to (HM Revenue, & Customs, 2011):

- handwritten invoices;
- copies, not originals;
- computer generated invoices using information obtained nefariously about other traders; and/or
- invoices prepared using legitimate invoices, or letterheads, obtained by theft, collusion or purchase from existing, insolvent or redundant traders.

2.6 Manipulation of liabilities

A standard VAT rate is charged on all supplies of goods and services unless they fall within the following categories specified by the VAT Directive (VAT basics for consumers, 2011):

- reduced rate;
- zero rate; and
- exempt.

A taxable person making a supply for VAT purposes can reclaim their input tax, except generally (subject to certain rules) for services falling within the category of exempt transactions.
It is therefore tempting for some taxable persons to do the following intentionally (What is VAT fraud? Examples of different types of VAT fraud, 2011):

- mis-describe what they supply so as to attract a lower rate of VAT; and/or
- collude with the supplier to mis-describe the supply so that it attracts a higher rate of VAT.

2.7 Invalid deductions of input tax

2.7.1 False input tax invoices

The following information must be stated on a VAT invoice (Invoicing rules, 2011):

- issue date;
- a sequential number (unique identification of the invoice);
- supplier’s VAT identification number;

- customer’s VAT identification number (where customer is liable for payment of the tax on the supply);
- supplier’s full name and address;
- customer’s full name and address;
- a brief record of the nature and quantity of the supplied goods and services;
- the date of supply or payment (if they differ);
- the administered VAT rate;
- the VAT amount payable;
- a detailed interpretation of the VAT amount payable per VAT rate or exemption; and
- the unit price of the non-taxable goods or services, discounts or rebates (unless included in the unit price).

In some cases, extra information must be included on the invoice, namely where (Invoicing rules, 2011):

- the supply qualifies as an exemption; or
- the customer is liable for tax payment (the “reverse charge procedure” applied to the supply); the invoice must state the following:
  - a statement clearly explaining why this is the case; or
  - a reference to the respective (Community or national) legislation which specifies the reverse charge procedure or the supply exempt;
- the intra-Community supply contains new means of transport;
- the margin scheme is administered,
  - a statement explaining why this is the case; or
  - a reference to the respective (Community or national) legislation; and
- the subject obligated to pay the tax is a functionary of tax authorities; his VAT identification number, full name and address.

2.7.2 Goods or services obtained for non-business use

The principle of neutrality requires full deductibility of VAT on goods and services used in taxed economic activities. VAT on goods and services obtained for non-business use (private or out-of-scope activities) or exempt activities (excluding exempt activities giving rise to a right of deduction like intra-Community supplies of goods or exports) is not deductible. In cases where goods and services are exploited for numerous purposes during their economic life cycle, it might sometimes be difficult to satisfy this requirement as nature of their use and exploitation is subject to change (European Commission, 2010b, p. 39).

2.8 Manipulation of accounting schemes

Various schemes in operation were designed to assist taxable persons to declare the right tax at the right time. According to the UK practice, these include (What is VAT fraud? Examples of different types of VAT fraud, 2011):

- the Annual Accounting Scheme;
- the Agricultural Flat Rate Scheme;
- the Cash Accounting Scheme;
- Margin Schemes for second-hand goods, antiques, works of art and collector's items;
- the Payments on Accounts Scheme;
- Retail Schemes; and
- the Tour Operators Margin Scheme.

Whilst most taxable persons use the schemes correctly, some attempt to use them to fraudulently evade VAT or manipulate them to gain a cash-flow advantage (What is VAT fraud? Examples of different types of VAT fraud, 2011).

2.9 MTIC fraud

In accordance with Article 2 of the Commission Regulation (EC) No 1925/2004 of 29 October 2004 laying down detailed rules for implementing certain provisions of Council Regulation (EC) No 1798/2003 concerning administrative cooperation in the field of value-added tax (Official Journal of the European Union, L 29/14), a trader who registers for VAT as a taxable person and who, with a potential fraudulent intent, acquires or purports to acquire goods or services without paying the VAT and supplies these goods or services with VAT without remitting the VAT due to the national authorities, is regarded as a missing trader.

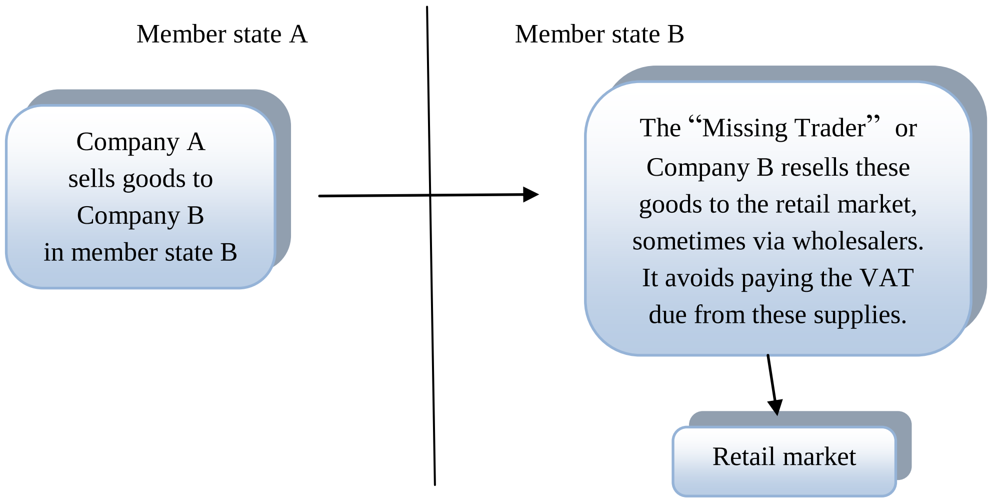
As the name suggests, MTIC fraud has two elements: a missing trader and an intra-Community supply. There are two categories of MTIC fraud, carousel fraud and "acquisition fraud" (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., p. I-4222).

2.9.1 Acquisition fraud

An acquisition fraud is a commodity-based fraud where standard-rated goods zero-rated for VAT purposes are purchased from a supplier based in another member state and sold in a member state of the acquirer for domestic consumption. The acquirer known as a "missing trader" subsequently fails to remit the VAT due which he has charged on the standard-rated taxable supply to its customers (What is VAT fraud? Examples of different types of VAT fraud, 2011).

The acquisition fraud scheme is illustrated in the figure 1 below. The term acquisition fraud, basically, refers to the following fraud strategy. Company B, which is registered for VAT in member state B engages in fraud as the Missing trader. It acquires goods from a supplier situated in a different member state (member state A) and afterwards resells those goods, normally to the retail market, either directly or via retailer. After the execution of transactions, Company B omits the VAT payment due on its onward supplies. Likewise, also regarded as acquisition fraud is a situation where Company B falsely presents itself as an operative VAT-registered company, but has actually hijacked the VAT number (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., p. I-4222).

Figure 1. Basic scheme of acquisition fraud



Source: H. Andersson & K. Franzen, *VALUE ADDED TAX. The right to deduct in case of carousel fraud*, 2008, p. 23.

2.9.2 Carousel fraud[3]

A carousel fraud is a financial fraud involving a misuse of the VAT system and resulting in the fraudulent extraction of revenue from the EU treasury. It may involve any type of standard-rated goods or services. Like with acquisition fraud, goods or services are acquired zero-rated from the EU, while the acquirer then goes missing without accounting for the VAT due on the onward supply. However, the goods or services do not become available in member state A for consumption; here, they are resold several times through numerous companies before finally being exported or dispatched, prompting a repayment from the tax authorities to the exporter or EU supplier in member state A. This process can be repeated over again using the same goods or commodities. When this happens, it is called carousel fraud (What is VAT fraud? Examples of different types of VAT fraud, 2011).

[3] Carousel fraud is explained in Chapter 4 in more detail. Also see Figure 2.

In other words, carousel fraud is when "the same goods travel within the Union from one member state to another and back again, without reaching an end-user" (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., p. I-4222).

Unlike acquisition fraud, a strategy in carousel fraud has the following characteristics. Company A, founded in member state A sells goods to Company B or so-called missing trader, founded in member state B. Afterwards, the missing trader resells these goods to Company C or so-called buffer company. However, during the process, Company B or the missing trader fails to account for the VAT (Opinion of Advocate General Poiares Maduro delivered on 7 December 2005 in Case C-384/04, n.d., p. I-4200). This buffer company or, in this case, Company C, can be completely unsuspicious of its involvement in the fraud and resells the goods at a higher price to yet another buffer company. It is only when the goods are eventually resold to a VAT registered company in a different member state that such a supply chain is interrupted. In some cases of true carousel fraud, this ultimate sale is even made to Company A in member state A. This terminal sale is zero-rated because of exporting. Nevertheless, the seller is still entitled to input VAT deduction. The EU provider seeks to recover the input VAT from the authorities (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., p. I-4223). Then, due to the VAT claim, the authorities forward a payment to the exporting company. This payment constitutes of the VAT charged on the sale by the previous buffer company, in this case Company C. However, the amount charged as VAT from Company B is not included in this payment. Then, the fraud can begin anew and during its process, the VAT paid to the missing trader or Company B is obtained from public revenue. The missing trader can be using a hijacked VAT number or register for VAT before disappearing and therefore preventing the revenue authorities from taking timely measures (Opinion of Advocate General Poiares Maduro delivered on 7 December 2005 in Case C-384/04, n.d., p. I-4201).

2.9.2.1 Contra trading

Contra trading is a further evolution of carousel fraud whereby, in order to hinder the detection of an MTIC fraud, fraudsters participate in two separate types of transaction chain during the same VAT period, where the output VAT from one chain is designed to offset the input VAT incurred in the other chain. The two types of transaction chains are (What is VAT fraud? Examples of different types of VAT fraud, 2011):

- "tax loss chains", where the taxable person incurs an input tax on purchases in member state A and makes zero-rated supplies of those goods to customers in other member states; and
- "contra chains", where the same taxable person typically acquires goods from another member state and sells them on in member state A, acting as an acquirer and generating an output tax liability from the onward sale in member state A.

Another expression of a missing trader is a "bogus trader". Initially, these fraudsters register for VAT legitimately. Afterwards, they make fraudulent claims for repayments from the tax authorities. These repayments are ultimately paid out, after which the bogus trader disappears (Cnossen, 2010, p. 53).

2.9.3 The difference between acquisition fraud and carousel fraud

The main distinction between carousel and acquisition fraud is that in acquisition fraud, taxable persons, most likely not involved in organised groups, usually retreat and disappear from the market. On the other hand, companies engaged in carousel fraud are in many instances financially supported by organised criminals. A common trick of them is to guarantee easy and quick earnings, usually to young individuals who must in return pretend to be representatives of a company that disappears from the market after some months of operating. In carousel fraud, the missing traders are replaced quickly and effortlessly (Needham, 2006, p. 7).

2.10 Labour provider fraud

Labour provider fraud involves the fraudulent evasion of VAT by a missing trader. Labour providers known as “Gangmasters” are usually present mainly in industries such as construction, security, cleaning, agriculture, leisure, transport and food. Typically, in labour provider fraud scheme, the final consumer contracts with the main contractor who provides labour. Afterwards, the main contractor may contract this provision to the subcontractor. The actual employer of the workers may be the main contractor, the subcontractor or in extreme cases the final consumers themselves. The final consumer actually receives the supply of labour and the main contractor invoices him accordingly. Furthermore, the subcontractor in turn invoices the main contractor and disappears with output VAT. Afterwards, the VAT is claimed by the main contractor. Like other frauds, there are indications that hijacked VAT registration numbers are also being used (What is VAT fraud? Examples of different types of VAT fraud, 2011).

2.11 Smuggled goods

Goods smuggled into a particular member state from other member states normally follow the pattern set out in MTIC fraud. However, the goods might end up being diverted for sale into the same member state’s shadow economy, even though the taxable person claims to have exported or dispatched them. Taxable persons who smuggle goods into a member state from outside the EU also fail to pay import VAT and duties (What is VAT fraud? Examples of different types of VAT fraud, 2011).

3 STATISTICAL DATA

3.1 VAT rates

Under Articles 96 and 97 of the VAT Directive, the standard VAT rate is required to range from 15% to 25%, with the latest figures of the highest rate being 27%, allowing member states to adopt the preferred rate within the given range. A comprehensive list in the Directive specifies categories of goods and services to which a reduced VAT rate of minimum 5% can be applied. The only member state, which applies a single standard rate of 25% is Denmark. All other member states have opted for one or more reduced rates. Upon joining the EU, some states managed to negotiate zero or reduced rates for certain categories of goods and services. Austria, for instance, was allowed to apply a reduced rate to wine produced by a farmer or a producer on an agricultural holding, and the UK applied the zero rate to children clothing, under Articles 114 and 119 of the VAT Directive.

Companies, which operate in more than one member state, can encounter difficulties due to non-uniform standard VAT rates. Multiple rates within each member state, driven by economic and social issues, are an additional problem. Among others, these multiple rates are one of the measures administered in order to address the issue of VAT's regressivity. From a social aspect, higher tax rates on luxury goods are regarded as beneficial; combined with low tax rates on necessities, they avoid burdening low-income groups with heavy tax. However, when purchasing necessities, the low VAT rates also apply to the population with high income. It would therefore be more appropriate to use other measures for reducing VAT's regressivity, such as providing family allowances, lowering employee social security contributions or lower income taxes. For example, New Zealand effectively implemented new measures when GST[4] was introduced. This was later followed by an increase in the VAT rate, which was successfully counterbalanced by reduced corporate and personal income tax rates (Charlet, & Owens, 2010, p. 952).

Besides creating distortions in the economy and increasing the complexity and costs for companies, multiple rate structure also causes confusion regarding its different rates and their correct application. Moreover, reduced VAT rates are not the most appropriate way to address the issue of VAT's regressivity. While a reduced VAT rate may be applied to paper books, e-books are standard-rated. In France, the rate of VAT applied to a chocolate bar is determined by the bar's dimensions and composition and can be charged accordingly at the standard rate of 20% or at the reduced rate of 5.5%. A case recently assessed by the ECJ evaluated the different VAT rates, which apply in horse sales; a racehorse sale is standard-rated and the sale of a horse used for agricultural purposes is subject to the reduced rate (Judgement of the Court (First Chamber) on 3 March 2011 in Case C-41/09, n.d., p. I-548).

[4] The abbreviation GST stands for goods and services tax.

In 2010, nine cases involving VAT rates were pending before the ECJ (A Guide to VAT in the 27 EU Member States, Norway and Switzerland, 2010, p. 1090). For this reason, it is preferable to use a single VAT rate (other than the zero rate for exports). Australia, Lebanon, Singapore, Thailand and numerous other countries, which recently adopted VAT chose the single rate. As seen in the EU example, applying a moderate single VAT rate to a broad consumption base with very few exemptions has proven to be more advantageous than a high standard rate combined with multiple rates and numerous exemptions. Not only has the EU practice proven to be inadequately efficient, it is not in compliance with International Monetary Fund (hereinafter: the IMF) or OECD standards, neither (Lang, Melz, & Kristoffersson, 2009, p. 84).

Table 1. EU-28 VAT rates, 2015 (%)

Member State	**Standard rate**	**Reduced rate**	**Super reduced rate**
AT	20 (since Jan 1984)	10	/
BE	21 (since Jan 1996)	6, 12	/
BG	20 (since Jan 1999)	9	/
CY	19 (since Jan 2014)	5, 9	/
CZ	21 (since Jan 2013)	10, 15	/
DE	19 (since Jan 2007)	7	/
DK	25 (since Jan 1992)	/	/
EE	20 (since Jul 2009)	9	/
EL	23 (since Jul 2010)	6, 13	/
ES	21 (since Sep 2012)	10	4
FI	24 (since Jan 2013)	10, 14	/
FR	20 (since Jan 2014)	5.5, 10	2,1
HR	25 (since Mar 2012)	13	/
HU	27 (since Jan 2012)	5, 18	/
IE	23 (since Jan 2012)	9, 13.5	0, 4.8
IT	22 (since Oct 2013)	10	4
LT	21 (since Sep 2009)	5, 9	/
LU	17 (since Jan 2015)	8, 14	3
LV	21 (since Jul 2012)	12	/
MT	18 (since Jan 2004)	5, 7	0
NL	21 (since Oct 2012)	6	/
PL	23 (since Jan 2011)	5, 8	/
PT	23 (since Jan 2011)	6, 13	/
RO	24 (since Jul 2010)	5, 9	/
SE	25 (since Jul 1990)	6, 12	/
SI	22 (since Jul 2013)	9.5	/
SK	20 (since Jan 2011)	10	/
UK	20 (since Jan 2011)	5	/

Source: VATlive, *2015 European Union EU VAT rates,* 2015.

VAT is a fundamental instrument for collecting and accumulating income in all EU governments. Due to currently unfavourable conditions in the EU economy, many of them have made an increase in VAT collecting in order to minimise their deficits. This can be achieved by the following two approaches. Firstly, member states have increased their VAT rates. 21 countries have upped their standard VAT rates since 2008 to January 2015.

Such an increase in VAT rates, is generally accompanied by a reduction in income tax rates. Since 2008, corporate income tax rates have been reduced in the following seven member states: Czech Republic, Denmark, Estonia, Finland, Slovenia, Sweden and the UK. The statutory rate of personal income tax has been reduced in Czech Republic, Hungary, Latvia, Lithuania, Malta and Romania. Certain governments reduced the social security contributions payable by employees or employers by increasing VAT revenue (Bulgaria, Croatia, Estonia, Germany and Sweden) (European Commission, 2013a, p. 20). Above mentioned member states are only those that did not make a subsequent increase of those rates. Improving the collection of VAT is the governments' second approach.

VAT is one of the primary sources of government revenue in all member states. From 2000 to 2011, average VAT revenues of the member states amounted to 21% of their total government revenues, or 7,5% of GDP. The highest percentage of VAT revenues in its total government revenues was registered in Bulgaria and the lowest in Italy (CASE & CPB, 2013, p. 11).

3.2 Estimating VAT losses

3.2.1 Macroeconomic approach – Top-down model

The VAT gap is calculated as the difference between the amount collected and the amount that *should* be collected. Macroeconomic data obtained from the national accounts (produced in accordance with International Standard SN93) are used to calculate the total revenue a member state should be able to collect. Actual net receipts are subtracted from this calculation and the result provides an estimate of the total scale of VAT losses (European Commission, 2006e, p. 6). Each member state is required to prepare estimates of the VAT fraud for Gross National Product purposes and calculate the differences between theoretical VAT receipts and actual VAT receipts as provided by Article 1 of the Commission Decision of 24 July 1998 on the treatment for national accounts purposes of VAT fraud (the discrepancies between theoretical VAT receipts and actual VAT receipts) (Official Journal of the European Union, L 234/39).

Advantages of the model (European Commission, 2006e, p. 6):

- it provides data that are useful for establishing long-term trends; and
- it allows international comparisons to be made, if the methods adopted and databases used are homogeneous.

Disadvantages of the model (European Commission, 2006e, p. 6):

- the top-down method does not provide details of the nature of these losses, nor of the varying impacts of each type of loss, e.g. missing trader fraud; and
- unless significant timing differences are identified to allow for the fact that some VAT payments and receipts in the current year relate to previous years or the subsequent year, there is a risk that significant movements in the VAT gap could be misinterpreted as changes in VAT fraud.

3.2.2 Microeconomic approach – Bottom-up model

The VAT gap is calculated using operational data, intelligence data and/or statistical surveys. As opposed to the top-down method of a singular process, the bottom-up approach is based on the extrapolation of data (of detected frauds) by several typologies (or types) of VAT fraud. In addition to estimating different types of fraud, the bottom-up method may also be used to estimate losses due to other forms of non-fraud compliance, such as unintentional errors (European Commission, 2006e, pp. 6 and 7).

Advantages of the model (European Commission, 2006e, p. 7):

- it gives more accurate figures on the different types of frauds underlying the VAT gap, e.g. MTIC fraud;
- it permits specific strategies to be developed to tackle the different types of fraud; and
- it can be used to corroborate the top-down VAT gap estimate.

Disadvantages of the model (European Commission, 2006e, p. 7):

- tax authorities may not be aware of all the different types of fraud. The extrapolation of data (of detected frauds), detected by using several methodologies, may therefore not provide a "complete true estimate" of the total level of VAT fraud;
- the VAT gap is due to fraud and possibly other reasons such as general non-compliance. Therefore, even if all the different types of fraud are known and extrapolated, this may not provide a complete true estimate of the total VAT gap. This is particularly important where a top-down VAT gap has not been prepared;
- for classical (i.e. non-organised) fraud the reliability seems to be lower;
- the low reliability in international comparisons since different methodologies are being used; and
- the long-term trend data are more reliable indicators of the level of fraud in comparison with annual fraud estimates.

3.3 VAT gap

A study regarding the evaluation of the VAT gaps for 26 of the 28 member states for the period 2000-2011 has been carried out recently. Croatia joined the EU after the completion of the report and Cyprus was excluded due to forthcoming revisions to its national accounts.

The VAT gap is defined as the difference between the theoretical VAT liability (VTTL)[5] according to the tax law and the actual revenue collected (VAT), in any country and in any year (in percentage or absolute terms). The theoretical VAT liability is calculated by applying the “top-down“ methodology in accordance with the Reckon Report (2009, p. 6), a study on VAT gaps for the period 2000-2006, modified as required (CASE & CPB, 2013, pp. 10, 18 and 27).

By analysing VAT gaps for the period 2000 – 2011, the following can be noted:

- presence of a moderate declining trend until 2008, mostly noticeable in post-accession countries;
- substantial differences in the performance of countries, with the most “unsuccessful“ countries not being able to adequately amend their poor performances; and
- since 2008, several countries' VAT systems have suffered under the strain of economic difficulties, leading to increases in VAT gaps even as rates were increased on several occasions.

Even though it is difficult to assess and determine the actual amount of money involved in VAT fraud, the study estimates that, in 2011, the VAT gap for the 26 member states totaled approximately EUR 193 billion or 1,5% of the EU-26 GDP, a noticeable increase from 1,1% in 2006. According to econometric estimates of the determinants of the VAT gap, an increase in tax rates is accompanied by a decrease in VAT compliance, mostly in countries with poor tax enforcement. Moreover, it appears that VAT compliance falls during periods of recession. The results correspond to some previously made estimates and also to predictions from the tax avoidance theory. The econometric analysis and the estimates of the VAT gaps provide some indication of the importance of tax compliance and tax enforcement considerations regarding VAT and its appropriate adjustment to conditions of fiscal pressure in Europe. Reforms to VAT policy and VAT enforcement can therefore be an important element of fiscal consolidation exercises, particularly in some member states (CASE & CPB, 2013, pp. 9 and 10).

In absolute terms, more than half of the total VAT gap was contributed by Italy, France, Germany and the UK, while Greece, Latvia, Lithuania and Romania were the countries with the largest VAT gaps in 2011 in terms of their own GDP as shown in the table below.

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[5] Abbreviation VTTL stands for VAT Total Tax Liability and means a theoretical VAT liability or potential VAT collections.

Table 2. VAT gap estimates (EUR million)

Member State	VAT receipts	VTTL	VAT Gap	VAT gap as a share of VTTL (%)		VAT gap as a share of GDP (%)	
	2011	2011	2011	2011	2000-2011	2011	2000-2011
Austria	23.447	26.915	3.468	13	11	1,2	1,0
Belgium	26.021	30.991	4.970	16	13	1,3	1,1
Bulgaria	3.352	3.956	604	15	16	1,6	1,8
Czech Republic	10.994	15.235	4.241	28	23	2,7	2,1
Denmark	23.869	26.436	2.566	10	10	1,1	1,1
Estonia	1.363	1.664	301	18	15	1,9	1,6
Finland	16.915	19.746	2.831	14	13	1,5	1,3
France	140.506	172.739	32.233	19	16	1,6	1,3
Germany	189.920	216.830	26.910	12	13	1,0	1,0
Greece	15.027	24.790	9.763	39	30	4,7	3,0
Hungary	8.516	12.216	3.700	30	26	3,7	3,0
Ireland	9.782	10.890	1.108	10	8	0,7	0,6
Italy	98.557	134.691	36.134	27	26	2,3	2,1
Latvia	1.368	2.322	954	41	24	4,7	2,3
Lithuania	2.444	3.795	1.352	36	35	4,4	3,9
Luxembourg	2.690	3.242	551	17	12	1,3	0,8
Malta	520	541	21	4	13	0,3	1,0
Netherlands	41.610	45.622	4.012	9	5	0,7	0,4
Poland	29.843	35.253	5.410	15	13	1,5	1,1
Portugal	14.235	16.999	2.764	16	9	1,6	0,8
Romania	11.412	21.760	10.348	48	42	7,9	5,4
Slovakia	4.711	7.484	2.773	37	29	4,0	2,9
Slovenia	3.049	3.375	326	10	7	0,9	0,6
Spain	56.547	71.744	15.197	21	12	1,4	0,8
Sweden	36.610	37.542	932	2	4	0,2	0,4
United Kingdom	130.577	150.064	19.487	13	12	1,1	1,0
EU-26, total	903.884	1.096.841	192.957	18	15	1,5	1,2
EU-26, average	..	..	..	20	17	2,1	1,6

Source: CASE & CPB, *Study to quantify and analyse the VAT Gap in the EU-27 Member States*, 2013, p. 29, Table 3.1.1.

The VAT gap is related to the VAT revenue ratio or VRR, which is a more general measure of VAT efficiency. VRR represents the supposed "ideal" amount of revenue that could be generated by a VAT system applied to consumption as measured in national accounts, exclusive of exemptions and zero or reduced rates and with perfect enforcement (or zero VAT gap). The VRR gap is a summary measure of the shortfall in VAT revenue collections compared to a benchmark of uniform taxation of all consumption, and full compliance by taxpayers. The VRR gap is therefore a measure which encompasses both the effects of policy and of taxpayer compliance on VAT revenues. VAT non-compliance (the VAT gap) contributes to the overall gap by reducing actual VAT revenues. Moreover, the policy gap additionally contributes to the total gap. The policy gap is mainly caused by member states’ departures from uniform taxation, such as VAT exemptions and reduced rates (CASE & CPB, 2013, p. 34). It represents the difference between the ideal revenues that could be collected by member states if they were to apply uniform taxation to all consumption and the actual revenues collected as a result of specific tax expenditures in the member states' VAT systems (European Commission, 2013a, p. 3). This is why the VRR gap evaluates and measures both the deficiencies in VAT policy and non-compliance by taxpayers[6]. An estimate of the VRR gap for the 26 member states was made by applying the corresponding standard VAT rate to final consumption (net of VAT receipts) for the period 2000-2011. With this, estimates for the policy gap were obtained, which can be compared to the estimates of previously reviewed VAT gaps (CASE & CPB, 2013, pp. 34 and 35).

Table 3 displays the mean VRR gap, the VAT gap, the estimated policy gap and their overall averages in the period 2000-2001 for each member state. As shown in the table, the average VAT gap is 17% and the median 13%. The average policy gap is 36% or twice its value, with the median at 36%. The values of the Policy gap are considerably dispersed and range from 14% (Romania) to 48% (Poland and Spain). However, in the majority of member states, the VAT Gap is generally of a smaller magnitude than the policy gap (CASE & CPB, 2013, pp. 35 and 36).

An analysis of these results points to the conclusion that the most significant VAT revenue loss is actually not caused by non-compliance (VAT gap). It is, in fact, generated by multiple rates and exemptions in national tax systems (European Commission, 2013a, p. 3).

Furthermore, the results of the study imply that, by taking appropriate measures, the VAT gap can be effectively addressed. This may be achieved by a well-planned combination of enforcement actions such as improved controls and audits, and policy adjustments such as broadening the tax base (European Commission, 2013a, p. 3).

The study carried out a top-down estimation of the VAT gap as estimating the relative contribution of different types of VAT fraud on the basis of publicly available data has been found to not be a satisfactory method already in the Reckon report. When making a bottom-up evaluation of levels of VAT fraud, one needs to begin with analysis of different categories of fraud. This is followed by assessing the extent to which the analysed elements reach. However, in order to do so, one must have access to operational data, which is usually classified and available only to tax authorities (Study to quantify and analyse the VAT gap in the EU-25 Member States, 2009, p. 99).

[6] More specifically, the definition of the VAT Revenue Ratio gap: *VRR gap = 1 – (Actual Revenue) / (Notional Ideal Revenue)*

Table 3. VAT gaps, Policy gaps and VRR gaps for the period 2000 to 2011 (%)

Member State	VRR gap	VAT gap	Policy gap
Austria	43	11	36
Belgium	52	13	45
Bulgaria	34	16	21
Czech Republic	50	23	35
Denmark	42	10	36
Estonia	34	15	22
Finland	44	13	36
France	52	16	43
Germany	45	13	37
Greece	58	30	40
Hungary	50	26	32
Ireland	43	8	38
Italy	59	26	45
Latvia	49	24	33
Lithuania	47	35	18
Luxembourg	28	12	18
Malta	51	13	44
Netherlands	44	5	41
Poland	55	13	48
Portugal	49	9	44
Romania	50	42	14
Slovakia	49	29	28
Slovenia	40	7	35
Spain	54	12	48
Sweden	48	4	46
United Kingdom	53	12	47
Average	47	17	36
Median	49	13	36

Source: CASE & CPB, *Study to quantify and analyse the VAT Gap in the EU-27 Member States*, 2013, p. 36, Table 3.2.2.

The VAT gap, however, is not affected only by fraud and evasion. It also implicates bankruptcies, legal tax avoidance, miscalculations, financial insolvencies and tax authority performance. In the UK, for instance, legal tax avoidance accounted for one third of the VAT gap in the period 2009-2010 (European Commission, 2013b, p. 1).

3.4 VAT regimes around the world

VAT is an important form of consumption tax. It is a major, rapidly expanding source of revenue for governments all over the world, already having been implemented by approximately 160 countries worldwide (Lejeune, 2011, p. 257). Table 4 demonstrates the worldwide VAT regimes[7]. VAT dates back to 1920 when it was initiated by a tradesperson from Germany. In 1954, it was put into use for the first time in France (Ebrill et al., 2001, p. 4). The VAT system in EU was originally launched in the late 1960s' via First and Second Directive as a substitute for national turnover taxes. At the time, the population of EU was 188 million with 6 member states[8]. Today, EU consists of 28 member states[9] with its own internal market and economy. All member states with a total of 505 million residents fall under the VAT regulation. VAT has become an essential part of the EU's both tax and economic systems. Furthermore, it assists in maintaining a non-distortive policy within the EU and complies with its fundamental freedoms (the free movement of goods, capital and persons). Recently, there have been suggestions for an even greater shift to VAT in order to achieve a reduction in national budgets' deficits and to meet the requirements of the Lisbon objective of raising the average labour participation rate (Lang et al., 2009, p. 73). As used in this chapter, all forms of the tax, including the goods and services tax, are encompassed by VAT.

Table 4. VAT/GST regimes around the world

Existing VAT/GST					
Albania	Central African Republic	Guyana	Malawi	Rwanda	Uruguay
Algeria	China	Haiti	Mali	Senegal	Uzbekistan
Antigua	Colombia	Honduras	Mauritania	Serbia	Venezuela
Argentina	Congo	Iceland	Mauritius	Seychelles	Vietnam
Armenia	Costa Rica	India	Mexico	Sierra Leone	Western Sahara
Australia	Djibouti	Indonesia	Moldavia	Singapore	Zambia
Azerbaijan	Dominican Republic	Iran	Mongolia	South Africa	Zimbabwe
Bangladesh	Dominica	Israel	Montenegro	Sri Lanka	Trinidad, & Tobago
Barbados	Ecuador	Ivory Coast	Morocco	St. Vincent	
Belarus	Egypt	Jamaica	Mozambique	Sudan	
Belize	El Salvador	Jersey	Namibia	Suriname	
Benin	Equatorial Guinea	Jordan	Nepal	Switzerland	
Bolivia	Ethiopia	Kazakhstan	New Zealand	Taiwan	
Botswana	Fiji	Kenya	Nicaragua	Tajikistan	
Brazil	French Guiana	Korea-South	Niger	Tanzania	
Burkina Faso	Gabon	Kyrgyzstan	Nigeria	Thailand	
Burundi	Gambia	Laos	Norway	Togo	
Cambodia	Georgia	Lebanon	Panama	Tonga	
Cameroon	Ghana	Lesotho	Papua New Guinea	Tunisia	
Canada	Grenada	Liberia	Paraguay	Turkey	
Cape Verde	Guatemala	Liechtenstein	Peru	Turkmenistan	
Chad	Guinea	Macedonia	Philippines	Uganda	
Chile	Guinea Bissau	Madagascar	Russia	Ukraine	

[7] All forms of the tax are included in VAT as well as the goods and services tax.
[8] The Netherlands, Luxembourg, Italy, West Germany, Belgium and France.
[9] Since figures were taken from an obsolete literature, an up-date has been made from originally 27 member states with 501 million residents to 28 member states with 505 million residents, considering Croatia has circa 4 million residents.

Table 5. VAT/GST regimes around the world (continued)

EU VAT system		Sales tax	Considering a VAT system
Austria	Latvia	Bhutan	Bahrain
Belgium	Lithuania	Cuba	Kuwait
Bulgaria	Luxembourg	Eritrea	Oman
Croatia	Madeira	Libya	Qatar
Cyprus	Malta	Myanmar / Burma	Saudi Arabia
Czech Republic	Monaco	Pakistan	The United Arab Emirates
Denmark	Netherlands	Solomon Islands	Yemen
Estonia	Poland	Somalia	
Finland	Portugal	Swaziland	**Future VAT/GST**
France	Romania	United States	Angola
Germany	Slovak Republic		Japan
Greece	Slovenia		Malaysia
Hungary	Spain		St. Lucia
Ireland	Sweden		Syria
Isle of Man	The Azores		
Italy	United Kingdom		

Source: I., Lejeune, *The EU VAT Experience: What are the lessons?*, 2011, pp. 258 and 259; Malaysia Goods and Services Tax, *Countries implementing GST or VAT*, 2014, Figure 1 (continued).

4 CAROUSEL FRAUD

4.1 General characteristics and operation

In the UK, the terms carousel fraud and MTIC, denote a specific form of VAT fraud. In its intent to collect VAT on acquired goods from other states, it takes advantage of the zero-rating of intra-Community supplies together with the “deferred payment” system. According to the latter, VAT on goods acquired from another member state is not collected at the border (due to abolition of fiscal frontiers among member states), but is, instead, collected at the time of the next periodic VAT return, as appointed with legislation alterations in 1992 (Keen, & Smith, 2006, p. 861).

As already stated in chapter 3, VAT represents 21% of member states’ overall annual revenue or 7,5% of their GDP averagely for the period 2000-2011 (CASE & CBP, 2013, p.11). Its standard rates differ from state to state, starting from 17 % and going up to as high as 27%. Needless to say, its considerable cash flow allures numerous traders who engage in shadow economy trade. Carousel fraud appeared for the first time in transactions between Belgium and the Netherlands back in 1980s’. Nowadays, it is a widespread phenomenon difficult to combat. An approximate calculation of carousel fraud in 2005 was GBP 1.12 – 1.9 billion in the UK and EUR 2.1 in Germany (A tax net full of holes, 2006). Carousel fraud is inclined towards trading with high-value and low-volume consumer goods, particularly electronics and technical goods. The discovery of the fraud by tax authorities is usually behind time as fraudsters generally disappear after they have successfully carried out their business (van Brederode, 2008, p. 32).

After the successful initial transaction, carousel fraud is able to financially support itself and even its expansion and growth. With the income it accumulates, facilitators of the carousel fraud are able to organise and set up new frauds. Generally, this is done via “business loans” from those already participating in the chain. This is why carousel fraud cannot be compared to any other conventional types of crime where the goods involved already have a pre-determined, specific market to be sold at. The main objective of carousel fraud is to cheat the VAT authorities by stealing VAT as many times as possible by putting the goods in circulation on multiple occasions. This exchange of goods only takes place within the carousel. Here, the amount of VAT and the price of goods in question are proportional; the higher the price of goods, the greater the figure of stolen VAT. Groups within the carousel fraud are not rivals and in order to make such a perplex constitution successful, their cooperation must be of an extremely high quality. An inquiry made in the UK about modern carousel tactics implies that criminal alliances lend and borrow each other the use of companies and goods at stake. This indicates that criminal groups help one another and have the knowledge and resources to effectively engage in fraud (Financial Action Task Force, 2007, p. 3).

4.1.1 Simple VAT carousel

One of the simplest methods found in category of MTIC fraud is where a trader does not remit the tax collected on their sales to the authorities. Over the last few years, EU has been hit by a much more harmful method of this fraud that does not directly target the Community. Instead, it is aimed at legislative acts, which have been put forward by member states with a view to encourage cross-border trade in the EU. The following four factors act in favour of such fraud (European Union Committee, 2007, p. 10):

1. The increase in goods of high value and low weight, consequently enabling cheap and hassle-free shipment of highly priced consignments.
2. In intra-Community cross-border trade, the zero rate of taxation. This permits non-payment of VAT on goods purchased by purchasers from other member states, even though they ultimately charge VAT on sales as usual.
3. VAT, which had already been paid to traders can be reclaimed by exporters or dispatchers. Consequently, revenue authorities are forced to deal with substantial financial losses after having made refunds for payments previously never received.
4. Deferred payment system, which enables the VAT to be paid periodically provides the fraudsters with enough time to disappear.

The same shipment of goods is repetitively traded between companies, which were established precisely for practicing this activity. Due to the circular flow of goods, this type of fraud was named carousel fraud. As a crime, MTIC fraud is quite easy to commit after the shell companies have been set up. After all, only one initial investment is needed in order to ensure a continuous cycling of goods and with this, ongoing income. Even though MTIC is also present in trade from countries outside EU, it is much more profitable in zero-rated trade taking place within the Community. Through incoming trade, goods come into EU in one member state even though their final destination is in another member state. Once under the Community Transit regulation, these goods can travel free of tax charges within the borders of the EU. Their source of origin becomes unknown even before they reach the targeted destination due to them being assorted into small and numerous consignments. Consequently, no Common Customs Tariff is ever paid on these goods (European Union Committee, 2007, p. 10).

A very basic form of carousel fraud is displayed in figure 2 where it is described how a so-called “conduit company”[10] (A) provides the “missing trader”[11] (B) located in a different state with an exempt intra-Community supply of goods. The “missing trader” accumulates goods free of VAT payment and eventually provides a third company (C), also known as the “broker”[12], with a domestic supply (for a price + VAT). The missing trader collects VAT on its sales to the “broker” without paying the VAT to the Treasury and hence, vanishes. Then, a refund of the VAT on his purchases from (B) is claimed by the “broker” (C). As an aftermath, the amount of VAT paid by C to B accounts for the financial loss of the Treasury. Eventually, an exempt intra-Community supply to company A can be declared by company C. Moreover, company A can then make another exempt intra-Community supply to company B. This is how the “carousel fraud” pattern repeats and continues over and over again (European Commission, 2004, p. 6).

In order to distort VAT investigations, the goods will often be supplied from (B) to (C) via intermediary companies called “buffers”[13] (European Commission, 2004, p. 6). These companies generate a gap between the broker and the missing trader by purchasing and selling the goods and accordingly account for VAT, making the transactions appear as authentic (Financial Action Task Force, 2007, p. 23). It may happen that the buffer is unaware of the fraud but in most cases he is conscious that he is involved in an irregular type of transaction (because of the unusual nature of the commercial transaction) (European Commission, 2004, p. 6).

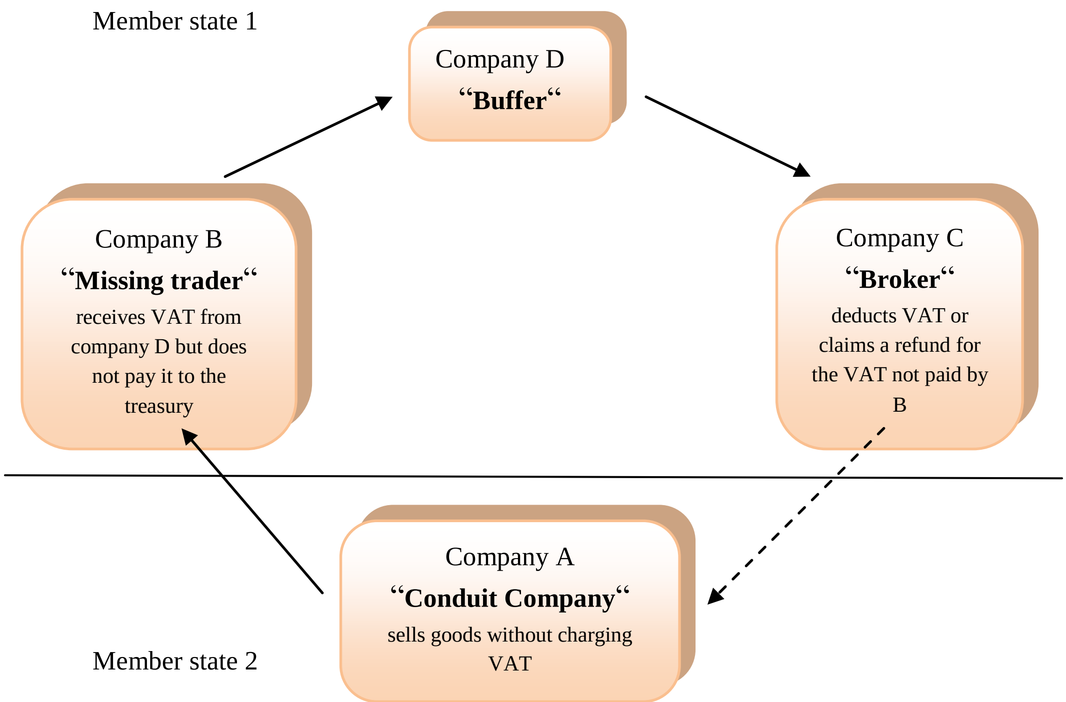
[10] A trader that purchases goods from one country and then immediately sells them to another country is referred to as a ‘conduit trader’ or a ‘conduit company’ (Financial Action Task Force, 2007, p. 25).

[11] A ‘missing trader’ is a company that facilitates the theft of the VAT by simply not accounting for it. It nearly always appears in the early stages of the chain and is usually registered at a residential address. The directors are either figureheads (the one with the title but no real authority) or their names are entirely fake (Financial Action Task Force, 2007, p. 25).

[12] A ‘broker’ is the key facilitator of the fraud and appears at the end of the transaction chain as an exporter. Brokers purchase goods from buffers and, in order to obtain a VAT repayment, sell them to other countries. They can sometimes be involved in more than one carousel transaction chain (Financial Action Task Force, 2007, p. 25).

[13] A ‘buffer trader’ or a ‘buffer’ is another company included in the chain whose purpose is to buffer and distance the exporter-missing trader connection. If the ‘missing trader’ sells directly to the ‘broker’ (exporter), the existence of the ‘broker’ is jeopardized; all transactions involved deal with businesses with no identity or tangible assets (Financial Action Task Force, 2007, p. 25).

Figure 2: The underlying mechanism of carousel fraud



Source: European Commission, *Report from the Commission to the Council and the European Parliament on the use of administrative cooperation arrangements in the fight against VAT fraud*, 2004, p. 6.

In most cases, fraudsters terminate their trade only when a major interruption occurs and leave the member state with considerable losses. Even though the goods will most often physically stay at the same location for the entire duration of this process, their ownership will change numerous times (Financial Action Task Force, 2007, p. 23). In some extreme cases, the goods actually never even existed even though fraudsters have sent and received invoices on them (Financial Action Task Force, 2007, p. 21). In practice, these kinds of fraud are constructed in a complex manner involving transactions between several member states and several companies in each member state (European Commission, 2004, p. 6).

4.1.2 VAT carousel using a third party

In their pursuance to overcome preventive actions against their fraud, criminals can be extremely inventive and cunning. As seen in Figure 3, one of their ways to evade their tracking is to circulate goods to non-EU country. This is done by exportation of goods from the EU to companies based in Customs Free Zones or Export Processing Zones (EPZ) in non-EU countries. In this procedure, the shipments can pass through numerous conduit companies stationed in the non-EU country’s EPZ. Afterwards they are imported back to the EU, generally to a different member state where, once again, the method of selling them through conduit companies stationed in various member states begins anew. Finally, the goods end up in the member state where the VAT is then stolen. Alliance between the EU and the non-EU countries is severely deprived of much needed cooperation and communication, which allows fraudsters to continue with their activities and makes any kind of prosecution quite troublesome, as well. According to indications of analysis of complete carousels, their main objective is to steal the tax. The analysis gave evidence that the amount of VAT due from the missing trader corresponds to the amount of sum of all financial acquisitions for every company in the carousel. It is therefore clear that carousel fraud is an intentional criminal offense aimed at the tax system and definitely not a manner of advanced tax planning (Financial Action Task Force, 2007, p. 23).

Table 5 below shows how the fraud is committed. As seen, chains of transactions initially work together. It presumes a 17.5% VAT rate and speculates that the missing trader stage is where the decline in price occurs

Table 6. Profit in a carousel fraud (EUR million)

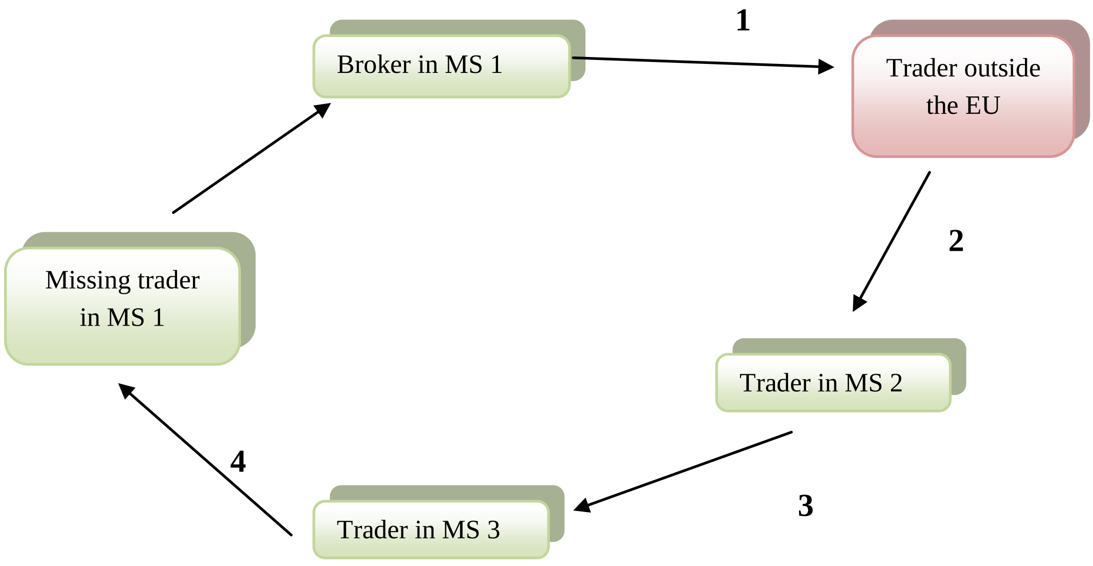
	Cost	Sales price	Profit	Input VAT	Output VAT	Net VAT due to customs	Net VAT paid/ (repaid)
Missing trader	110	100	-10	0	17.5	17.5	0
Buffer 1	100	102	2	17.5	17.85	0.35	3,500
Buffer 2	102	104	2	17.85	18.2	0.35	3,500
Buffer 3	104	106	2	18.2	18.55	0.35	3,500
Broker	106	110	4	18.55	0	-18.55	-185,500
Net profit			0				-175,000
Net profit %			0				17.5

Source: Financial Action Task Force, *Laundering the Proceeds of VAT Carousel Fraud*, 2007, p. 23, Table 1.

The carousel scheme, using a non-EU country as illustrated in Figure 3 operates as follows:

1. At the end of the transaction chain in member state 1 (MS1), the broker exports to a non-EU country. He is entitled to claim a repayment of input VAT from the government of member state 1. Fraudsters typically export to non-EU countries due to their free-trade zones or low duties on imports.
2. Sometimes within just a few hours, fraudsters transport the goods back into the EU, (member state 2 (MS2) and member state 3 (MS3)) with member state 1 being stated as the final destination. According to the Community Transit regulation, once the goods re-enter the EU, import duties are deferred until the goods arrive in their final country of destination.
3. In order to camouflage the identity of the goods, consignments are sometimes split before being sold in different member states via several traders.
4. Goods then emerge as intra-Community supplies and are sold to the missing trader in member state 1 VAT-free.

Figure 3. VAT carousel using a third party



Source: Financial Action Task Force, *Laundering the Proceeds of VAT Carousel Fraud*, 2007, p. 24, Figure 5.

4.2 Carousel fraud involving money laundering

Via VAT carousel fraud, enormous profits get to be accumulated by criminal groups over time. The following subchapter will try to clarify the essential nature of this type of crime, its relation to money laundering and ultimately, seek to raise global awareness on the matter. This is important as carousel fraud cultivates funds, which are, by laundering, often used in other more or less threatening and dangerous types of crime, including terrorism. Goods circulate within the carousel, which is, in most instances, "mind guided". A slight profit comes with the transaction each time the ownership of goods changes. This disguises the illegal state of the transaction and also adds to the value of VAT to be reclaimed at the final link of the crime chain. The catch is, the goods gain in their value and price through circulating with each time they are traded. In case this gets out of control, prices could escalate extremely. Therefore all goods involved in carousel fraud need to be undervalued prior to their repeated circulation, which oftentimes takes place in non-EU countries. The main objective of this undervaluation is to lower the import tax on account of the non-EU countries. This "deficit" gets to be covered by a repayment of VAT by the member state. However, the payment is not always received by the missing trader right away. This is where the "buffer" comes in. A buffer company forwards a payment straight to the EU supplier and sends the remaining balance to an offshore account, which is used for the payment of handling fees of subjects involved in the fraud. These third party payments are sometimes "justified" by invoices for the offered services such as repayment of loans with exaggerated interest rates etc. This diminishes the danger of missing trader's property seizure by authorities and suspends his requirement for owing a bank account.

Consequently, proof of their identity is unneeded and therefore non-existent (Financial Action Task Force, 2007, p. 4).

In some cases, payments are made in instalments. Here, the VAT component is subsequent to the payment of the reclaim. It has been determined by the UK that the same offshore banks are used by the vast majority of fraudsters engaged in carousel fraud, hence disabling the transparency of transactions to UK law enforcement agencies. Furthermore, operating with accounts within the same bank noticeably speeds up money transfers, reduces errors and works in favour of successful concealment. Due to rapid development of technology, traders can opt for online money transfers and thereby ensure anonymity to involved parties. Last, but not least, they can engage in fraud from their PC regardless of their location (Financial Action Task Force, 2007, p. 4).

In the long run, considerable amounts of money are withdrawn from the EU and then safely kept on off-shore bank accounts, appearing as legitimate transactions. Their discovery and exposure largely depend on the sums behind them, together with other indications mentioned in subchapter 4.4. Therefore, in order to prevent money laundering, the financial institutions must comply with Financial Action Task Force (hereinafter: the FATF[14]) requirements regarding their customers and act responsibly (Financial Action Task Force, 2007, p. 8). The *Money Laundering and Terrorist Financing Typologies 2004-2005* report issued by FATF acts in favour of this belief and suggests the use of the Alternative Remittance System (hereinafter: the ARS). The ARS will recognise the transaction as standard, unless acquainted with the profile of the fraud. Attention to the scale of transaction must be paid since it usually, in fraud, does not correspond to the supposed commercial activity of the remitter. That is why it is useful to be familiarised with the nature of remitter's business activity. Transactions concerning the fraud are typically large and frequent and the funds involved normally pass promptly through the system. In order to make a thorough check on transactions, ARS operators dealing with electronic payments must make a comparison between originator's details and details of the ultimate beneficiary (Financial Action Task Force, 2005, p. 25).

4.2.1 Countries of choice for depositing money

It has been found that money laundering and carousel fraud tend to be inclined towards particular destinations[15] when choosing the location of the fraud. The following factors seem to affect the decision about choosing the destination[16] (Financial Action Task Force, 2007, p. 10):

[14] FATF is an inter-governmental 'policy-making' body which develops and promotes national and international policies to fight money laundering and terrorist financing (Financial Action Task Force, 2011).
[15] The report does not contain the list of countries covered by the questionnaires due to the low response rate which would provide inaccurate and unreliable results (Financial Action Task Force, 2007, p. 9).
[16] Not all of these reasons are applicable to all countries (Financial Action Task Force, 2007, p. 9).

- the disposal of high performance online banking facilities which enable instant money transfers and are equipped with other up-to-date financial features;
- experience and knowledge regarding money laundering;
- the possibility of “lawful” investments in commercial construction schemes;
- minimal degree of international cooperation and regulatory agencies;
- the criminals’ native country – this can have a significant impact on the movement of laundered money;
- the levels of already existing legitimate trade – this can be used as a cover-up for illegal transactions;
- close commercial and cultural connections with other countries worldwide; and
- the deficiency in formal correspondence concerning legal assistance and extradition.

In some cases, money is sent back to the member state in which the fraud commenced. Even though it was not possible to acquire complete information about how this is done, the project implies that it is carried out via falsely designed loans, property market investments or the use of false invoices from the service sector. Nevertheless, it is not easy to back up such an assumption since there is no physical presence of these goods. However, there have been unconfirmed cases where VAT money from carousel fraud carried out in the UK was reinvested in the UK property market (Financial Action Task Force, 2007, p. 10).

4.2.2 Correlation to other crime

4.2.2.1 Interconnection with organised criminal gangs

Criminal gangs must be extremely well organised in order for them to launder the substantial amounts of money without disturbances. Financial institutions within the state and the states themselves can be radically afflicted by their progression and expansion. Since VAT carousel fraud can create considerable profits with a practically non-threatening risk of prosecution, it attracts criminals engaged in more traditional kinds of serious organised crime. According to evidence from the UK, tremendous sums of money, which consequently led to further criminality, have been associated with carousel fraud. In the UK, countless severely violent armed robberies have been carried out at the numerous freight forwarder premises. Goods intended for carousel fraud use were stolen in these robberies. Moreover, there have been some instances, where fraudsters hijacked and “stole” their own goods. Following that, they made false insurance claims and used those funds to financially support more carousel fraud. Due to the fact, that carousel fraud produces enormous amounts of money, extortion techniques are applied by other criminal gangs as a way of extracting a portion of the money (Financial Action Task Force, 2007, p. 11).

4.2.2.2 Funding other crime

It has been made evident that carousel fraud is in some cases funded by other types of organised crime. In Spain for example, VAT carousel fraud was found to be “financially supported” by certain criminal organisations which, in return, demanded a share of the profit. Electronic payments from VAT carousel fraud can be directed to source countries where they can be used to purchase drugs. With the money they get in exchange they pay other criminals engaged in VAT carousel fraud, e.g. freight forwarders and “buffer traders”. It is vital to have the knowledge and understanding of how carousel fraud is initially financially rooted by these criminal associations. A more intense international cooperation regarding carousel fraud must be established and encouraged in order to successfully identify and target its true sources of income (Financial Action Task Force, 2007, pp. 11-12).

4.3 The carbon VAT fraud

In 2005, the EU Emissions Trading System (ETS) was set up. Nowadays, this association is the world’s leading multinational scheme. It is a so-called “cap and trade”[17] system, which focuses on greenhouse emissions reduction. This is done by assigning allowances on emissions. These allowances are allocated free of charge or auctioned and can be transferred amongst operators. A yearly cap decrease of 1.74% is anticipated for the period 2013-2020, which should result in 21% reduction of 2005 emissions (Department for Environment, Food and Rural Affairs, 2008, p. 20).

Several markets are engaged in “carbon trading”. Major carbon exchanges in the EU are Climex in the Netherlands, BlueNext in France and the British Climate Spot Exchange. After being issued, EU emission allowances (hereinafter: the EUAs) acquire a market value and can be exchanged between traders on a spot or a forward basis. Their transfers between taxable persons are considered as a supply of services for VAT purposes (Foster, 2009, p. 11) and are subject to tax in the member state of the recipient. EUAs are easily traded in particular markets, especially where concerning regulation is not strict, making them an ideal target for carousel fraud. Their high value is an additional reason to attract fraud (Foster, 2009, p. 11). EU emission allowances are sold to companies by criminals and VAT is charged in this process. Afterwards, the fraudsters fail to deliver the revenue to the authorities and ultimately, disappear (Murray, 2009).

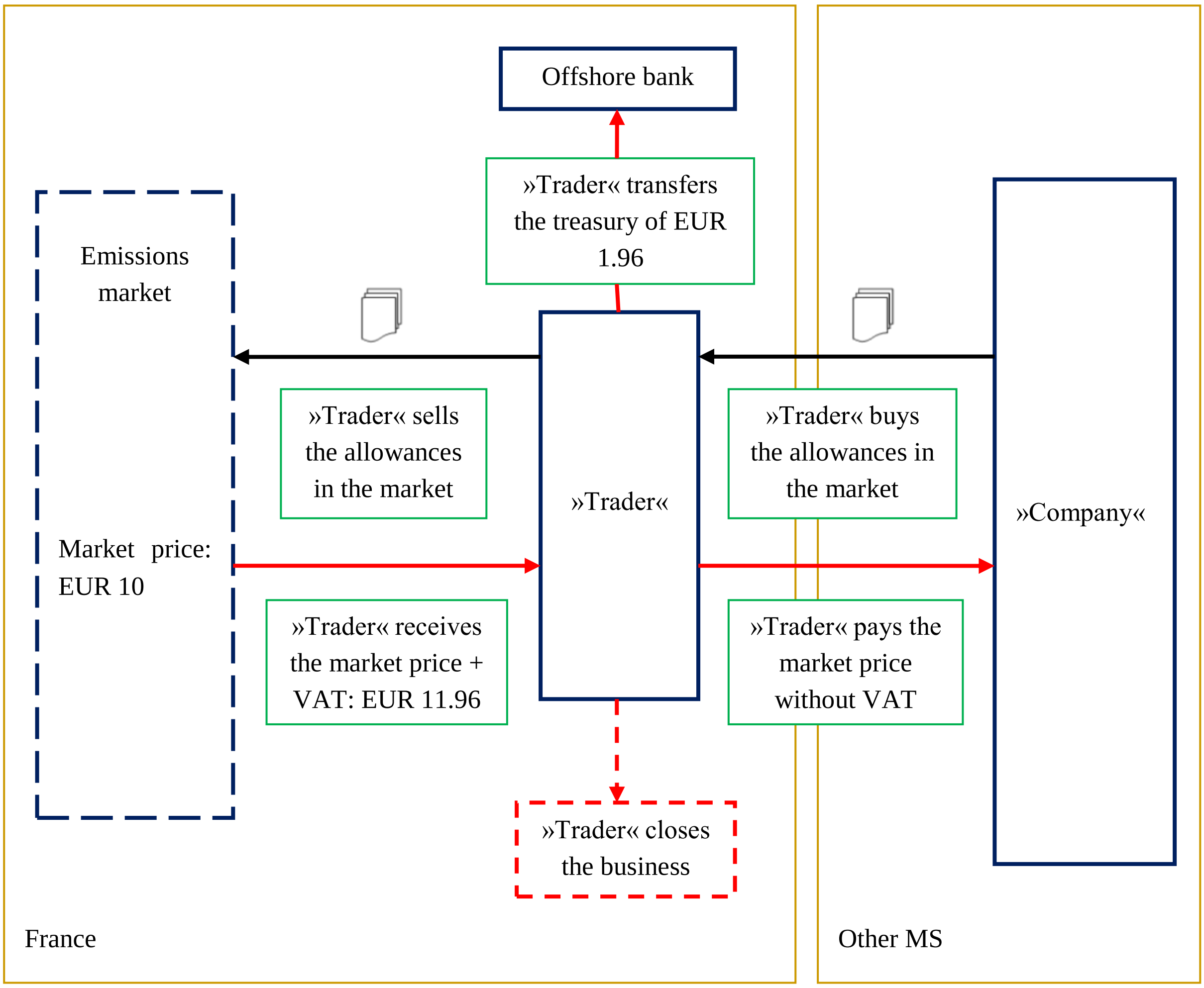
The UK and German governments conducted several raids in 2006, with the UK introducing “reverse charging” for VAT on certain items susceptible to carousel fraud.

[17] ‘Cap and trade’ is an environmental policy tool that regulates pollution by requiring mandatory caps on emissions while allowing a certain degree of flexibility in how the sources comply. Successful ‘Cap and trade’ programmes value efficiency, innovation and early action and provide strict environmental accountability without inhibiting economic growth (U.S. Environmental Protection Agency, n.d.).

Carousel fraud was then chiefly regarded as confined to small electronic goods such as computer chips and mobile phones. One year later, it was observed that fraudsters were simply moving away from those goods and using others not yet targeted by the authorities. Still, carousel fraud only became an issue in carbon markets in 2006 after high trading volumes had been observed on french BlueNext carbon exchange (Mackenzie, 2009). In the summer of 2009, several suspected fraud cases were detected in a number of member states, which provoked an immediate response from numerous EU authorities. As a security measure, they added greenhouse gas emission allowances to the list of supplies to which a reverse charge system could be administered. Subsequently, VAT was eliminated from carbon permits in the Netherlands and France in June 2009 (Frunza, Guegan, & Lassoudiere, 2010, p. 2).

Figure 4 presents a carousel VAT fraud scheme, which involves carbon emission allowances or carbon credits.

Figure 4. Carousel VAT fraud involving carbon emission allowances or carbon credits



Source: M. Frunza, D. Guegan, & A. Lassoudiere, *Statistical Evidence of Tax Fraud on the Carbon Allowances Market*, 2010, p. 3, Figure 1.

Apparently, substantial quantities of carbon credits were acquired from other member states, free of tax by the trading companies involved in the scheme. Afterwards they sold the credits on the French BlueNext carbon market at a price that had already been marked up with VAT and therefore allowing VAT reclaim from the French tax authorities by the market players. The VAT revenue was supposedly never declared and remained withheld by the suspects. In May 2009, 15.1 million metric tonnes of EU carbon permits were involved in the exchange, shortly followed by 19.8 million tonnes in June. As soon as the announcement of a reverse charge of VAT was declared in June 2009, the exchange volumes became almost non-existent (Frunza et al., 2010, p. 3).

4.4 Awareness of indicators

Since national and Community legal entities are obliged to issue rulings concerning participation of taxable persons in carousel fraud which they were supposed to be aware of, there is a need to identify possible indicators which can provide these persons with guidelines regarding the risk of losing their entitlement to input VAT deduction (Collins, & Cooper, 2006, p. 10-11).

Within the Community, there is no particular legislation, which would banish deduction rights to traders engaged in carousel fraud. However, according to case law, member states can choose to adopt national legislation to act in situations where traders know or should have known that they were taking part in a fraudulent transaction. Accordingly, their right to deduct can be withdrawn (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6197).

Frequent checks on the taxable person's transactions needs to be performed in order to evaluate the possibility whether they had known they were involved in fraud or not (Collins, & Cooper, 2006, p. 10-11).

The following features may indicate involvement in VAT carousel fraud (Financial Action Task Force, 2007, p. 16):

- contacts lack knowledge of the goods and the market or new contacts have been introduced to leading positions in the companies;
- assets and sectors of the company alter quickly;
- a considerable turnover growth during a brief period of time;
- unrequested proposals suggesting high profits on deals from companies with no market history;
- bizarre interest rates and terms of unsecured loans;
- directions implying to pay a reduced instead of full price to the supplier, sometimes even less than the invoiced VAT;
- instructions to carry out considerable payments to offshore accounts and third parties;

- the use of high value/low volume goods with an attached high tax rate;
- funds credited to an account followed by a prompt transfer to accounts of other companies;
- accounts used only to transact large amounts of funds;
- accounts with a generally low balance which channel substantial sums of money;
- considerable withdrawals of cash;
- engagement in activities separate from major goals of the company and failure to disclose annual records of its activity;
- instantaneous payment of invoices that stretch well beyond the usual financial means of the company;
- absence of required invoice elements, e.g. date or/and VAT number;
- companies run by citizens of foreign countries with no evident previous experience in business leadership and with no residence within the area of local authority;
- invoices for services that are not related to company's business;
- exports of goods and services seemingly varying from their usual market rate;
- numerous bank accounts belonging to various "cover-up" companies in different financial institutions;
- suppliers using the same, usually offshore financial institution to execute payment transactions;
- acquiring loans that in their amount correspond to the amounts of VAT reimbursement for the scheme's initial investment;
- the fact that companies engaged in carousel fraud solely sell to traders and not retailers; and
- the fact that goods used in carousel fraud are oftentimes specific to a given market.

4.5 Case law

There are various kinds of carousel fraud schemes. A comprehensive analysis of three ECJ cases has been carried out. Its results help to understand how these criminal schemes function. In the three cases studied, numerous carousel fraud set-ups taken from real situations are covered. The analysis includes engagement in carousel fraud, knowingly and not, with details described below. Regarding taxable persons unaware or with no reason to believe they were engaged in fraud in the Optigen case (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., p. I-500), the ECJ examined their right to deduct. In the FTI case (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., p. I-4210), situations where taxable persons can be jointly and severally liable for the VAT in carousel fraud were taken under perspective. Circumstances in which taxable persons were aware or should have been aware of their involvement in carousel crime and their right to deduct are examined through the Kittel case (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6161). The results of the analysis of these three cases offer a better insight on the issues related to dealing with the right to deduct in circumstances where taxable persons were involved in carousel fraud knowingly or not. However, the concluded resolutions in these cases may also generate new interpretation difficulties with reference to determining whether a company was involved in carousel scheme or not.

4.5.1 The Optigen case

4.5.1.1 Background

The joined case between Optigen Ltd, Bond House Systems Ltd and Fulcrum Electronics Ltd initiated a lawsuit against the tax authorities, which refused to repay VAT concerning the companies' purchase of computer processing units (hereinafter: the CPUs) in the UK, subsequently traded abroad to another member state (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., pp. I-483 and I-515).

The companies purchased CPUs from UK-founded companies. Later on, they sold them to companies founded in another member state. A net balance of input VAT of a different amount was claimed by each of the three companies. The related transactions turned out to be linked to a chain of supply, which took part in a carousel fraud. In this chain, a defaulting trader[18] was involved. The ultimate resolution determined that the claimants did not and could not have known that their transactions were engaged in carousel fraud (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., pp. I-506 and I-507).

4.5.1.2 Optigen and Fulcrum Electronics

Optigen and Fulcrum Electronics were both engaged in computer chips trade. They were purchasing these chips from UK-founded companies and selling them to clients in a different member state. Neither of the two companies had no intent whatsoever to participate in carousel fraud. However, their transactions did take part in a carousel scheme. Nevertheless, both companies were unaware and had no reason to suspect they were involved in fraud. In spite of that, the tax authorities turned down their VAT return claim on the ground that the mentioned transactions were not made within an economic activity and were deficient in economic substance. According to the authorities, the purchases were not supplies used for business purposes and nor were they expected to be used for these purposes (Opinion of Advocate General Poiares Maduro delivered on 16 February 2005 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., p. I-488). An appeal made by Optigen and Fulcrum Electronics was filed against the tax authority's refusal to

[18] A 'defaulting trader' is a trader that acquires a liability for VAT without actually discharging his liability with the tax authorities; instead, he disappears. The defaulting trader may also use a VAT number of another company (Joined cases C-354/03, C-355/03 & C-484/03, p. I-483).

repay the VAT (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., p. I-508).

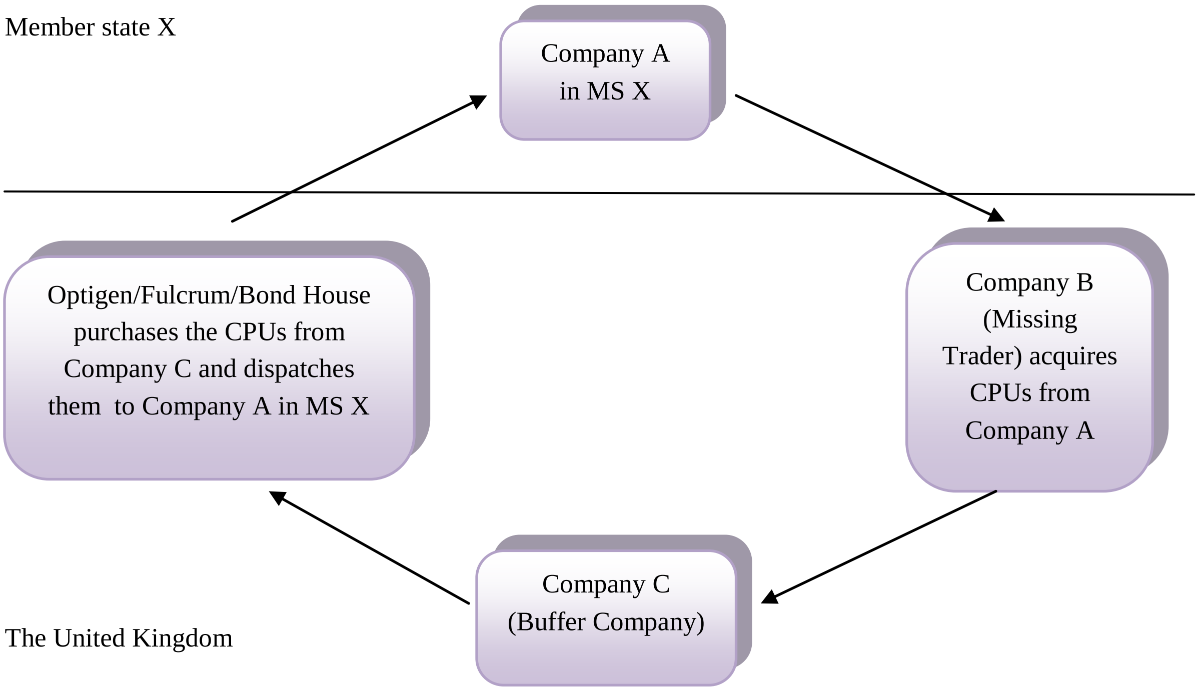
A GBP 7 million refund of input VAT was claimed by Optigen. Fulcrum Electronics' claim for a refund was GBP 7,2 million in June and GBP 4 million in the following month. Ultimately, the verdict made by the tax authorities turned down Optigen's refund claim and partially disallowed Fulcrum Electronics' refund claim. The refusal stated that the purchases made by both companies lacked economic substance and were not part of any economic activity. Subsequently, Optigen and Fulcrum Electronics filed an appeal against the verdict to the VAT and Duties Tribunal in London. None of the considered companies took part in fraud nor had any reason to suspect they were involved in it. They both were ordinary purchasers in the business process and did not trade with the trader using the hijacked VAT number or the missing trader (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., pp. I-506 - I-510).

4.5.1.3 Bond House Systems

Bond House Systems (hereinafter: Bond House) was a company primarily dealing with computer components. It was incorporated in England and Wales. Its major business was purchasing CPUs from traders that had registered for VAT in the UK and later reselling them to companies registered for VAT in other member states. 51 transactions of CPUs were executed by Bond House in May 2002 and all of them were made to clients in other member states, occupying circa 99% of the total May turnover. The UK suppliers purchased the CPUs at fair market values in all 51 transactions. Bond House paid the suppliers the arranged price along with VAT and afterwards resold the CPUs to clients in other member states. These clients purchased the CPUs at a somewhat higher price than Bond House. The supplies were zero-rated and a VAT return for May 2002 was made by Bond House. Afterwards, the company requested a repayment of the amount of VAT it had paid to its supplier. The repayment of the claimed input VAT for 27 out of 51 purchases was denied by the tax authorities. Consequently, an appeal against the ruling was made by Bond House (Opinion of Advocate General Poiares Maduro delivered on 16 February 2005 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., pp. I-489 and I-509).

A refund of GBP 16.3 million for input VAT was claimed for the supplies involved. However, due to the fact, that the transactions were a part of a supply chain involving a defaulting trader, a reclaim of solely GBP 2.7 million was permitted in favour of Bond House, which was consequently followed by the company's appeal to the VAT and Duties Tribunal in Manchester (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., pp. I-506 and I-507). Any VAT fraud allegations regarding Bond House were dropped as the company was unaware of the fraud in question. Furthermore, it was determined that Bond House did not act carelessly and that it did not engage in business with the fraudulent traders. The authorities confirmed the legitimacy of all Bond House transactions, which is to say that via the transactions, actual money and goods were exchanged (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., p. I-511).

Figure 5. The Optigen carousel scheme



Source: H. Andersson & K. Franzen, *VALUE ADDED TAX. The right to deduct in case of carousel fraud*, 2008, p. 20.

4.5.1.4 Questions referred

The national court examined whether the related transactions, supplies of goods and taxable person involvement were in compliance with the VAT Directive. Even though they were involved in a supply chain where previous and following transactions proved to be fraudulent, the transactions themselves were not, but without the trader related to the trustworthy transaction knowing or having any way of knowing that the chain took part in carousel fraud. In addition, the national court also questioned whether traders in such particular situations can be subject to limitations regarding their right to deduct VAT (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., pp. I-515 and I-516).

Two aspects of the Optigen case are relevant. Firstly, the ECJ brought a resolution to cases where a transaction that is involved in a supply chain in which previous and following transactions were fraudulent constitutes a supply of goods effected by a taxable person and an economic activity as specified by the VAT Directive. Secondly, in respect of such cases, the ECJ resolved the question of limitations regarding the right to deduct. Moreover, Optigen and Fulcrum insisted that the decision whether a trader should or should not be entitled to acquire a credit for VAT payment ought to be based on their factual transaction and its purpose, not on previous and following transactions unknown to the trader. In accordance with UK legislation, the trader's right to acquire a credit for VAT payment will be decided upon all transactions made within the chain of supply. All transactions executed in a supply chain that was engaged in carousel fraud fall outside the scope of the VAT Directive. As a consequence, legitimate traders who unknowingly participate in these transactions shall not be subject to VAT Directive. According to the tax authorities, a trader's right to acquire a credit for payment of VAT ought to be based on transactions in which the trader was an actual participant. Any fraudulent activities in the supply chain that the trader was unconscious of should not influence the decision regarding his right to obtain a credit. Excluding a taxable supply would therefore be contradictory to the VAT Directive (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., pp. I-516 and I-517).

4.5.1.5 Findings of the ECJ

In accordance with the results of ECJ's analysis of the concept of economic activity, the scope of economic activity is quite extensive. In terminology, the term "economic activity" denotes something of an objective nature and should therefore be considered by itself only, exclusive of its intent or outcome (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., p. I-519; Judgement of the Court on 12 September 2000 in Case C-260/98, n.d., p. I-6572). Likewise, the terms "taxable person" and "supply of goods" are also both objective in nature and are applied regardless of their intent or result of the transactions they concern (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., p. I-519). According to ECJ, the taxable person's intent in transaction is not supposed to be subject to tax authorities' investigation as this would prove to be contrary to the VAT system's objectives of ensuring legal certainty and facilitating VAT application (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., p. I-520; Judgement of the Court (Fifth Chamber) on 6 April 1995 in Case C-4/94, n.d., p. I-1010). Furthermore, according to the common VAT system, the trader's intent in other previous or future fraudulent transactions unknown to the taxable person is also not to be subject to investigation. For these reasons, every transaction ought to be evaluated on its own. Furthermore, occurrences previous to and following the transaction must not be permitted to alter the character of the transaction (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., p. I-520).

4.5.1.6 Judgement

In line with the provisions of the VAT Directive, non-fraudulent transactions constitute supplies of goods and/or services, taxable persons acting as such and economic activities. The trader's intent in connection with the transaction is irrelevant. Situations in which the taxable person was unaware that the transactions formed a part of a fraudulent supply chain, and are preceded or followed by an illegal transaction, the taxable person's right to deduct input VAT cannot be restricted. As firmly stated by the ECJ, the right to deduct is an integral element of the VAT system and should therefore not be subject to any restrictions. Solely the fact that the VAT on a preceding or a following sale of goods failed to be paid to the authorities should not provide an adequate reason to affect the right to deduct input VAT (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., pp. I-521 and I-522).

4.5.1.7 Conclusions

A taxable person should be able to legitimately assert their right to deduct input VAT in cases where they did not know or could not have known that the preceding or following transactions in the chain were fraudulent. The trader's right to deduct should not be called into question if they took all possible measures in order to avoid involvement of their transactions in carousel fraud (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., p. I-517). A fundamental element of the VAT system is that every transaction in the supply chain is to be regarded individually and also that VAT is to be charged on each one. This stated, the nature of the transaction cannot be affected by former or consequential events. As required by the principle of legal certainty and on account of the neutrality of the VAT system, each transaction ought to be treated individually (Opinion of Advocate General Poiares Maduro delivered on 16 February 2005 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., pp. I-493 and I-494). However, certain questions remain unsettled as the ECJ only assessed the right to deduct in instances where traders were unaware of their involvement in fraud and did not consider situations where traders knew or should have known about it.

4.5.2 The FTI case

4.5.2.1 Background

In this dispute, 53 traders in mobile phone and CPUs and their trade body, the Federation of Technological Industries (hereinafter: the FTI), confronted the Attorney General and the tax authorities. This legal action was taken up in order to review and assess national provisions, which were designed to combat fraudulent manipulation of the VAT system and their compatibility with Community law. More precisely, the provisions targeted were national laws and regulations, aimed at fighting and preventing MTIC and carousel fraud. The FTI inquired whether the provisions are harmonious with Community regulations. As required by the national rules, when claiming a refund, the taxable person must be able to provide evidence concerning the VAT in question. Furthermore, when making a VAT credit, the tax authorities are entitled to demand a security to be given by the taxable person (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., p. I-4213 - I-4217). In addition, these regulations can also impose the joint and several liability of those traders who were aware of or had any reason to believe that all or partial

VAT of the supply in question would be subject to non-payment (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., p. I-4225).

On account of various types of fraud, the public revenue in the UK suffers losses of more than GBP 1.5 billion on a yearly basis. Traders who were aware of or had any reason to believe that all or partial VAT of a supply would not be paid are, according to the UK legislation, subject to joint and several liability. The main reason behind introducing such national legislation was to take action against MTIC fraud. However, according to the FTI, this legislation was not consistent with the legislation of the VAT Directive as the latter does not allow the implementation of such measures by member states. The Court of Appeal assessed the FTI's complaint and suspended the procedure. Ultimately, the ECJ was requested to make a preliminary ruling (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., pp. I-4218 - I-4223).

4.5.2.2 Community legislation

A taxable person executing a taxable supply of goods is subject to VAT payment. A taxable supply of goods may be executed by a taxable person founded in a member state other than the state in which the VAT is due. In such cases, the member state may appoint the recipient of the supply to be liable for VAT payment, as stated in Article 194 of the VAT Directive. In certain situations, the VAT payment may become a responsibility of the recipient of the supply of goods, but only when specific criteria are met. Nonetheless, member states are allowed to make exceptions from this provision in cases where the person responsible for VAT payment is a tax representative, as defined in Article 204 of the VAT Directive. Whenever a taxable intra-Community acquisition of goods occurs, pursuant to Article 200 of the VAT Directive, VAT shall be payable by the taxable person acquiring the goods in question. Exceptionally, member states are also entitled to impose VAT payment onto subjects other than the taxable person mentioned above. The main objective was to determine and assess the existence of coherence and adequacy between Community legislation and national rules, as provided by Article 205 of the VAT Directive.

4.5.2.3 National legislation

The legislation in question was the UK's Finance Act 2003, Sections 17 and 18. Both of them were introduced to minimise VAT system misuse, including MTIC and carousel fraud (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., pp. I-4213 and I-4221). The following national legislation review is based on data provided by the ECJ. When a taxable person claims a refund of input VAT, the tax authorities are entitled to request appropriate evidence from them regarding the VAT in question. Traders who engage in supply chains where tax payment is avoided shall be subject to the national Finance Act. The Act is responsible for determining their joint and several liability which applies to particular goods in cases where a taxable supply is made to a taxable person who is aware of or has reason to believe that all or partial VAT regarding the mentioned supply will not be paid. In such instances, the taxable person can be issued a notification, informing them about their outstanding VAT amount. In doing so, joint and several liability is assigned to the taxable person to whom the notification is addressed to as well as to the subject actually liable for the VAT payment in question. If the amount that the taxable person had paid for goods was lower than the lowest expected open market value or lower than the value of any previous supply of the same goods, the taxable person shall be assumed to have reason to believe that all or a part of the VAT would not be paid. If, on the other hand, they are able to provide proof that the low price of the supply is independent and therefore not connected to non-payment of VAT, the taxable person shall not be assumed to have reason to believe that the VAT would not be paid (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., pp. I-4217 and I-4218).

4.5.2.4 Questions referred

The member states are entitled to adopt regulations such as those in the national Finance Act. According to the arguments of the FTI, however, the Community legislation does not allow practical implementation of these national regulations for member states. As a consequence, the Court of Appeal of England and Wales temporarily suspended the process and called the ECJ for a preliminary ruling in order to make an inquiry about five different issues out of which only one will be discussed in this paper as others are not directly related to the topic (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., pp. I-4223 and I-4224): "Insofar as the national legislation is consistent with the general principles of Community law and therefore in compliance with Community legislation, are the Member States permitted to adopt it when it implies that joint and several liability regarding VAT payment may be assigned not only to the person actually liable for it but to any other taxable person as well?"

As a result of this case, the ECJ was obliged to clarify whether Community legislation excludes national legislation when it comes to assessing joint and several liability of taxable persons, since both the person actually liable and any other taxable person may jointly be defined as such. Another issue that required clarification was whether transactions in which traders were aware of the fraud and those in which they were not, should be treated differently.

4.5.2.5 Findings of the ECJ

As the ECJ specifies, member states can adopt Community legislation according to which joint and several liability may be assigned to a taxable person other than the person actually responsible for VAT payment. Insofar as the legislation regarding joint and several liability of a taxable person corresponds to the principles of proportionality and legal certainty of the Community law, member states are allowed to accept it. The proportionality principle instructs member states to do no more than what is absolutely necessary in pursuance of their goals. In accordance with the national legislation, the responsibility of joint and several liability may be assigned to a taxable person in cases where that taxable person knew or had reason to believe that all or partial VAT of the supply would not be paid. If the price of the goods in the supply was lower than their lowest expected open market value or lower than the value of any previous supply of the same goods, then the taxable person shall be presumed to have had reason to suspect fraudulent behaviour. Such assumptions are legally permitted. They cannot, however, be presented in a manner which would obstruct or even prevent the taxable person from providing proof of the opposite to the tax authorities and therefore automatically reinforce the rights of the public exchequer. Legality of legitimate, fraud-free and transparent transactions should not be questioned and traders who engage in them must be able to rely on laws and regulations of the legislative system without possibility of being wrongly charged with joint and several liability regarding VAT payment (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., p. I-4227 - I-4229).

4.5.2.6 Judgement

A taxable person, to whom a supply of goods has been made and who was aware or had any reason to believe that all or partial VAT of the supply in question, or any preceding or following supply would go unpaid, can be burdened with joint and several liability together with the person actually responsible for VAT payment. In accordance with Community legislation and the Community law, the member states are permitted to take on such measures provided that they agree with the law's general principles, especially with principles of proportionality and legal certainty (Judgement of the Court (Third Chamber) on 11 May 2006 in Case C-384/04, n.d., p. I-4229).

4.5.2.7 Conclusions

The member states are permitted to enact legislation which makes a taxable person, to whom a supply of goods has been made, jointly and severally liable to pay the VAT, together with the person actually liable. However, solely in cases where the taxable person was aware or had reason to believe that all or partial VAT in question would go unpaid, such legislation can be applied. At the same time, Community's principles of proportionality and legal certainty must be followed accordingly. The principle of legal certainty calls for predictable and transparent application of Community's measures for those who are to depend on them (Opinion of Advocate General Poiares Maduro delivered on 7 December 2005 in Case C-384/04, n.d., p. I-4205). Considering the principle of proportionality as defined in Article 5 of the VAT Directive, a member state is not allowed to go above what is needed to achieve the objective when taking action. However, this case failed to resolve the issue of defining what exactly it takes for a taxable person to be regarded as having had reason to be aware of their participation in carousel fraud. With no adequately specified instructions and guidelines, the national courts may encounter great difficulties when trying to assign liability regarding VAT payment.

4.5.3 The Kittel case

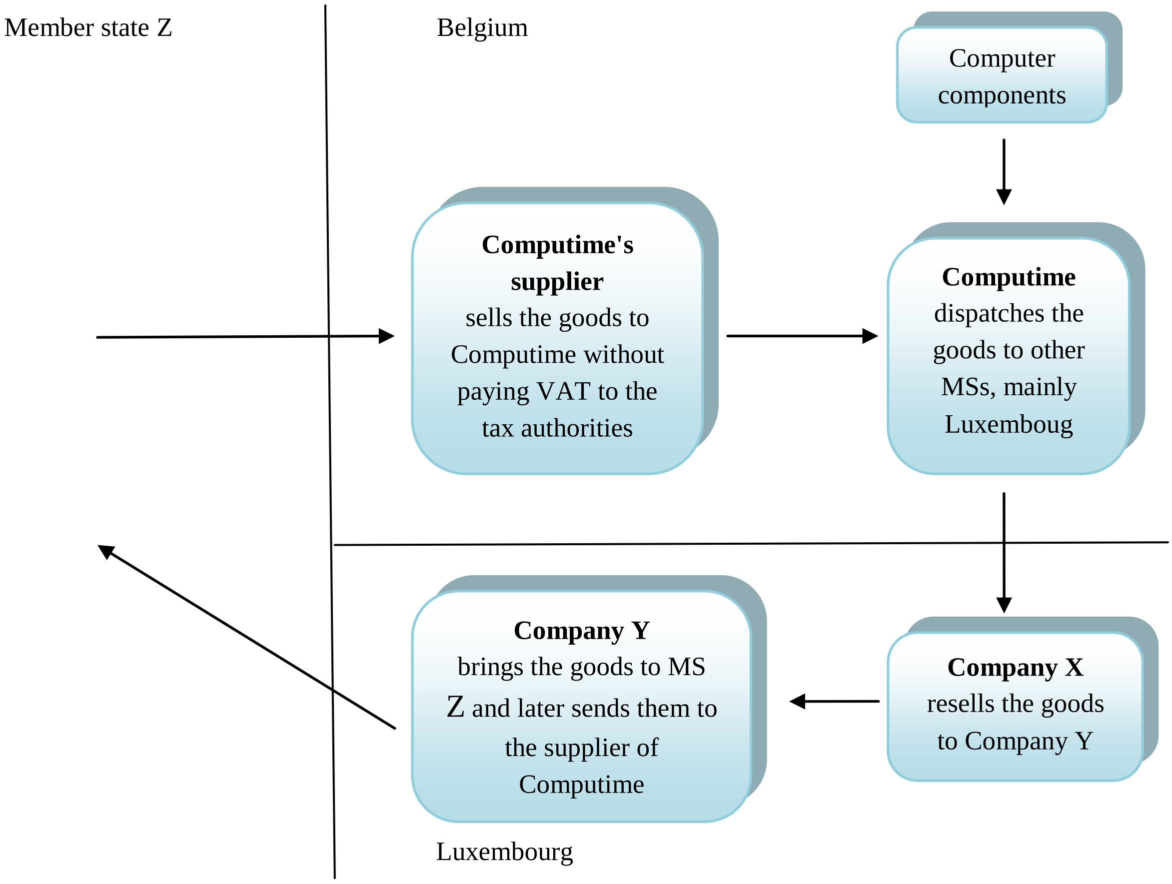
4.5.3.1 Background

The Kittel case was a joint trial combining two related claims; Computime, represented by Mr. Kittel vs. the Belgian state and the Belgian state vs. Recolta Recycling. The Belgian tax authorities rejected a deduction of VAT paid on certain transactions. Their rejection was based on assumptions that those transactions were by some means associated with carousel fraud. The company was supposedly aware of its involvement in carousel fraud in case of Axel Kittel against the Belgian state whereas in case of Belgian State against Recolta Recycling, the company executed the transaction with decent intentions, without any knowledge of participating in carousel fraud (Opinion of Advocate General Ruiz-Jarabo Colomer delivered on 14 March 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6163; Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6179).

4.5.3.2 Computime

Computime's business included purchasing and reselling computer parts. The tax authorities argued that fictional supplies were made to Computime and that the company's goal was to reclaim VAT invoiced by suppliers for the same goods via carousel fraud. On account of that argument, the authorities turned down the company's request for a deduction of the VAT paid on those supplies. The computer parts and units were originally bought in Belgium and were eventually exported to other member states out of which Luxembourg received the majority of the export. Once in Luxembourg, the parts were then again resold to another Luxembourg-based company who transferred them to a neighbouring member state. From there, the components were eventually shipped to the Computime supplier who failed to settle the VAT invoiced to Computime. Allegedly, Computime was aware of this VAT fraud (Opinion of Advocate General Ruiz-Jarabo Colomer delivered on 14 March 2006 in Joined cases C-439/04, & C-440/04, n.d., pp. I-6165 and I-6166; Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6183).

Figure 6. The Computime carousel scheme



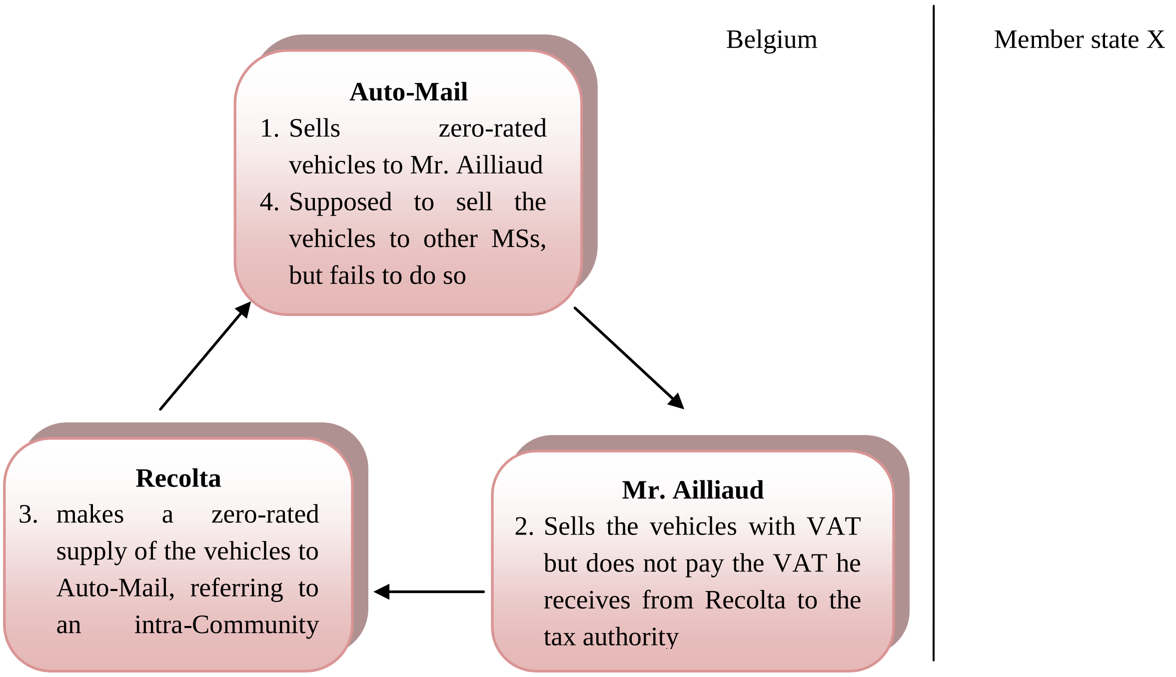
Source: H. Andersson & K. Franzen, *VALUE ADDED TAX. The right to deduct in case of carousel fraud,* 2008, p. 26

Belgian tax authorities issued a report, which stated that Computime had consciously taken part in a carousel fraud and it was therefore not possible for the company to deduct the VAT paid on its supplies. In addition, the report also stated that Computime was not only to repay taxes but also to pay fines in the amount of circa EUR 18 million. Consequently, Computime filed a complaint to the Court of First Instance, demanding a suspension of the payment request in question. Both, this court and Court of Appeal declared the appeal as unjustified and groundless. Following this ruling, yet another appeal was filed against the decision, this time to the Court of Cassation where Computime was represented by Mr. Kittel (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6183).

4.5.3.3 Recolta

Recolta's validity regarding its purchase of 16 luxury vehicles from Mr. Ailliaud is examined and specified in another case. Initially, the vehicles in question were bought by Mr. Ailliaud from a company named Auto-Mail without them being subject to VAT. Later on, upon its purchase, Recolta paid the VAT and Mr. Ailliaud failed to pass it on to the state of Belgium. Eventually, Recolta sold the vehicles back to Auto-Mail as an intra-community supply and therefore with no VAT payment requirements. In order to intentionally evade VAT payment, the luxury vehicles formed part of a specially designed organised fraud scheme and in reality never left Belgium at all. After carrying out a detailed research on the matter, the Special Inspectorate of Taxes Investigation came to a verdict that Mr. Ailliaud and Auto-Mail together had intentionally designed a carousel fraud scheme. Furthermore, because of its apparent involvement in this scheme via certain transactions, Recolta was requested to pay fines and taxes of BEF several million. Later on, however, Recolta filed a complaint against these allegations to the Court of First Instance. According to conclusions of this court, no valid indications were found which would imply that Recolta or any of its executives were aware or had reasons to suspect that they had participated in a fraud scheme. Consequently, the Belgian state unsuccessfully filed a complaint against this ruling to the Court of First Instance before appealing to the Court of Cassation (Opinion of Advocate General Ruiz-Jarabo Colomer delivered on 14 March 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6166; Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., pp. I-6184 and I-6185).

Figure 7. The Recolta carousel scheme



Source: H. Andersson & K. Franzen, *VALUE ADDED TAX. The right to deduct in case of carousel fraud,* 2008, p. 23.

4.5.3.4 Community legislation

Firstly, a brief overview of Community legislation is required in order to carry out an adequate analysis of the Kittel case. Goods and services are to be burdened with a general tax on consumption, which must by all means be proportional to the price of those goods and services. Pursuant to Articles 1 and 2 of the VAT Directive, the supply of goods or services in question is subject to VAT and a taxable person shall make that supply within the country's territory. When transferred, the right to dispose tangible assets is considered to be a supply of goods, defined in Article 14 of the VAT Directive. According to Article 167 of the VAT Directive, the right to deduct arises, when the deductible tax becomes chargeable.

4.5.3.5 National legislation

The following summary is based on data provided by the ECJ. It is a brief and concise overview of Belgium's national legislation related to the topic discussed. According to Belgian law, obligations lacking reasonable grounds and obligations based on illegitimate or unlawful facts have no legal validity whatsoever. Under the given law, the term "unlawful" refers to opposing law, public policy or morality. The appeal of the state of Belgium to the Court of Appeal of Liège stated that the central objective of the arrangement between Mr. Ailliaud and Recolta was that Mr. Ailliaud's goal was to carry out transactions that were not in keeping with VAT. The transactions were claimed to be unlawful and the trader had therefore no right of deduction as the supply in question was not deemed as a supply of goods (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., pp. I-6182 and I-6185).

4.5.3.6 Questions referred

With a view to ensuring the most correct judgement possible in both Recolta and Computime cases, the Court of Cassation brought up two issues to the ECJ and requested for their clarification. The questions referred were as follows (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6187):

1. Considering the principle of fiscal neutrality and the national legislation, which states that the contract of sale is void if there is an unlawful basis of the contract, may the taxable person who was unaware of the fraud loose the right of deduction in this case?
2. May the taxable person loose his right of deduction on the basis of the fact that the contract is void for fraudulent evasion itself?

Regarding the Computime case only, the court raised yet another question (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6187):

3. May the taxable person loose the right of deduction on the ground that the contract of sale is void due to fraudulent evasion known to both parties?

There are two reasons why this case is relevant. Firstly, the ECJ clarified whether Community law precludes national legislation. According to the national law, the right to deduct is limited to taxable persons who were unaware and had no reason to suspect that their transaction was involved in fraud caused by another taxable person. Secondly, it also assessed situations where taxable persons were aware or should have been aware of the fact that their transactions were involved in a fraud scheme.

4.5.3.7 Findings of the ECJ

The right to deduct is one of the fundamental principles of the common VAT system. It may not, in principle, be restricted (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6193). The VAT payment ought to be the consumer's liability as the last person in the chain whereas traders should not be subject to these duties. As the rules regarding deduction exempt traders from this responsibility, they are an important segment of the VAT governing rules. Apart from that, the deduction rules secure the taxation neutrality amongst various types of economic activities and thus make the purpose and results of those activities irrelevant (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6194). Due to reasons of the principle of fiscal neutrality, a general difference between lawful and unlawful transactions is in practice almost impossible to determine (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6194). This implies that traders should under no circumstances be put at risk of losing their input VAT deduction right in cases where every possible precaution was taken from their party to avoid fraud involvement. A legitimate trader should always be able to rely on validity of his lawful transactions (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6195). However, those taxable persons who were aware of or had any reason to suspect that they had engaged in a fraud scheme are to be treated differently, with respect to the third question. In order for the taxable person to be entitled to VAT deduction, certain requirements need to be met. To begin with, the supply must be a supply of goods. In addition, the transaction needs to be carried out by a taxable person and has to be classified as an economic activity, as provided by Articles 1 and 2 of the VAT Directive. The required conditions are not fulfilled in instances when tax evasion is the main objective of the executed transaction (Judgement of the Court (Grand Chamber) on 21 February 2006 in Case C-255/02, n.d., p. I-1672). Any activities focused on combating tax evasion and tax misuse in general are strongly encouraged by the Community legislation. With regard to their fraudulent objectives, it must not be made possible for traders to rely on Community legislation. If proven that the deduction right had been abused for fraudulent purposes, the tax authorities are entitled to claim a repayment of the unlawfully deducted tax. Where the main objective of a transaction is to purposely evade VAT, a taxable person executing that transaction should under no circumstances be eligible for VAT deduction. The latter is also applicable to those taxable persons who were aware or should have been aware of their participation in fraudulent transactions. In such cases, taxable persons are presumed to be participants in the fraud and whether or not or to what extent they had gained profit from the sale is an irrelevant factor. Whenever a taxable person assists another person in the process of executing a fraudulent activity, they are to be regarded and treated as an accomplice. Such approach was introduced in order to minimise and prevent VAT fraud (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., p. I-6193 - I-6196).

4.5.3.8 Judgement

The ECJ regulation states that the VAT deduction right cannot be withheld in cases where the taxable person was unaware or could not have been aware of their involvement in a fraudulent transaction initially caused by another trader. As a participant or an accomplice in the fraud, however, is considered to be a taxable person who had every reason to assume that their engagement in certain transactions was unlawful. With a view to reduce and limit the occurrence of VAT abuse, the national courts are entitled to rightfully deny the deduction right to those taxable persons who acted as an accomplice in illegitimate transactions (Judgement of the Court (Third Chamber) on 6 July 2006 in Joined cases C-439/04, & C-440/04, n.d., pp. I-6195 and I-6196).

4.5.3.9 Conclusions

The ECJ confirmed its conclusion concerning the first question in the Optigen case. The deduction right must under no circumstances be denied in situations where the taxable person had no knowledge or suspicion of their unintentional involvement in fraudulent activities. Such a measure would be inconsistent with the common VAT system principles (Judgement of the Court (Third Chamber) on 12 January 2006 in Joined cases C-354/03, C-355/03, & C-484/03, n.d., p. I-522). What remained unsettled after the Optigen inquiry was the third question relating to assessment of cases where a taxable person did have full knowledge of being a participant in carousel fraud. Despite the fact that the Kittel case ruling did resolve the matter to a certain extent, inconsistencies in this domain are still present and it is up to national courts to decide whether the taxable person’s input VAT deduction right shall be withheld in cases of deliberate participation in fraudulent activities. Nevertheless, the court must still clearly state and specify any allegations of the supposedly conscious involvement in carousel fraud before lawfully denying the deduction right. The review of objective factors as a basis for such judgments is somewhat unreliable.

5 SOLUTIONS CAPABLE OF REDUCING A VAT FRAUD

Several proposals regarding measures to combat VAT fraud have already been suggested to the Commission. These measures mainly focus on adjustments to the current tax system, the implementation of a definitive VAT system, a general reverse charge mechanism and other potential solutions combat and prevent tax evasion or fraud.

The fundamental principles issued and adopted by the EU are, above all, fair competition, Common Market formation and a ban on measures which could in any way prevent unrestricted and free flow of goods, services, funds and people. Since these principles must be respected and followed thoroughly, the process of designing measures to successfully combat VAT fraud is a quite demanding task (International VAT Association, 2007, pp. 13 and 14).

Moreover, these measures should also be in compliance with the following VAT principles defined in the First VAT directive (International VAT Association, 2007, p. 14):

- the establishment of a single VAT system;
- neutrality regarding the origin of the goods and services;
- neutrality regarding the length and size of the transaction chain;
- proportionality with regard to the price of the goods and services; and
- a non-aggregate system which serves as a basis for charges: input tax is deductible from output tax.

It is therefore apparent that an uncomplicated tax system lowers costs of tax regulation compliance for companies. Furthermore, such system is relatively inexpensive whilst generating fewer errors and allowing less space for fraud (International VAT Association, 2007, p. 14). The OECD has declared that the OECD countries' tax authorities are prepared to take on the challenges of globalisation in the interests of their citizens. Among other challenges, the OECD lists improving the efficiency of tax authorities, reducing tax compliance costs for companies and minimizing the risks of tax evasion and fraud (OECD, 2005, p. 120). The matter of concern here is whether fraudulent behaviour can eventually be reduced whilst the administrative tax regulation charges imposed on liable taxpayers remain the same and do not increase. It is therefore necessary to find and ensure an appropriate balance between addressing tax fraud and fundamental VAT principles relating to legal security, proportionality and legitimate expectation (International VAT Association, 2007, pp. 14 and 15).

As stated by the Commission, any modifications to the existing VAT system must meet the following requirements (European Commission, 2006b, p. 9):

- a significant reduction of fraud-convenient opportunities
- absence of major new fraud threats and risks;
- causing no additional administrative costs and burdens;
- tax neutrality; and
- equal treatment of both foreign and national operators in a member state.

In evaluating the benefits and drawbacks of each solution addressed in the thesis, the preconditions laid out by the Commission are referred to.

5.1 The "reverse charge" mechanism

With regard to supplies of goods and services within a member state, VAT is generally charged by the supplier. According to the "reverse charge" mechanism, the subject accountable for VAT payment is the purchaser and provision of any evidence regarding that transaction to the tax authorities is the supplier's or service provider's responsibility. As a consequence of such reverse charge system, only the final, retail level of the transaction chain is charged with VAT (International VAT Association, 2007, p. 22).

Pursuant to Article 17 of the VAT Directive, the right to deduct VAT is applicable when the recipient is a taxable person who, on the VAT return, accounts for the amount of VAT due in accordance with the reverse charge mechanism. However, the recipient may also decide to account it as input VAT on the same VAT return. In such cases, the taxable person is not bound to pay VAT and a repayment cannot be claimed. Whereas in the system, where there is no reverse charge applied, the supplier will charge VAT to the purchaser and shall be liable and accountable for its payment. This applies if the goods and services in question are not classified as one of the following; a supply with a reverse charge, a supply outside the EU or intra-community supply.

In accordance with Articles 194-197 of the VAT Directive, the reverse charge mechanism is applicable and its use permitted in specific situations. For example, if the provider of services is established in another member state, the application of the reverse charge is allowed. Another example, if the supplier supplies particular goods that are susceptible to fraud. Such a clause in the Directive provides member states with autonomy when deciding whether or not, to apply the mechanism in the given circumstances, provided that the requested criteria are met.

Since the procedure of tracking down a taxable person established outside the member state in question is more complex, the use of the reverse charge mechanism in such situations enables a much more manageable and easier collection of VAT as it significantly reduces their chances of tax payment avoidance. Numerous member states have been successfully applying the general reverse charge system when dealing with taxable persons established elsewhere (Ludviksson, 2012, p. 7).

Without such a mechanism, foreign suppliers delivering services in countries where they are not established must in principle register for VAT purposes and meet all the VAT obligations in that member state. To avoid such administrative burdens on foreign providers and ensure that VAT is accounted for, the reverse charge mechanism allows (or sometimes requires) the VAT-registered customer to account for the tax on supplies received from foreign traders. However, the reverse charge mechanism is not applied in all jurisdictions and, where it is implemented, the rules may differ across member states (OECD, 2011, p. 5).

As a result of their specific structure, certain economic sectors have shown to be considerably more prone to fraudulent abuse and more difficult to supervise and keep under control than others. Supplies arising from those sectors are subject to optional use of the reverse charge system. An actual example of such practice occurred in the construction industry, where the mechanism helped to prevent an attempt to evade a considerable amount of tax; the main contractors intended to deduct the VAT that the subcontractors had never made payment for. Another example is a transfer of greenhouse gas emission allowances (European Commission, 2005, p. 8).

In accordance with Article 27 of the VAT Directive, the member states are entitled to introduce special derogations, which would allow them to make exemptions from the VAT Directive. With an intention to minimize opportunities for tax evasion and make VAT collecting more manageable, these exceptions would be applicable to supplies that are liable to be subjected to the reverse charge mechanism. In order for a derogation to be granted, a member state must firstly apply for it to the Commission and if the application meets the criteria, the Council will thereupon either approve or deny the state's request.

This generalised mechanism enables VAT receipts and the responsibility to account for the collected tax to be centred in one stage of the overall transaction chain. It is not possible to claim input VAT without being accountable for payment of VAT from the supply. Such a measure practically eliminates any chance to commit fraud and therefore ensures that there are no VAT revenue losses caused by input VAT or VAT repayments. As a result of VAT related fraud, Germany's annual loss in 2005 was estimated to be as high as EUR 18 billion which counted for nearly 11% of the yearly issued VAT receipts. These evaluation figures called for an immediate and thorough action in order to reduce the existing levels of VAT fraud and even though Germany eventually carried out a detailed research on the matter, no adequate solutions were found. The implementation and appropriate application of the reverse charge mechanism in the member states have so far proven to be successful and beneficial. In its request to adopt the mechanism in 2005, Austria made a reference to the positive outcome of the construction industry affair, indicating that it was an influential and determining factor when deciding whether to apply for it or not. In 2006, Austria, the UK and Germany made a request to the Commission, asking for permission to introduce the reverse charge mechanism into their legislation. This mechanism would then be applied to nearly all national transactions between taxable persons in these member states. The UK attempted to apply it to certain goods that had shown to be related to the member state's high levels of tax evasion, particularly in the domain of mobile phone technology, microchips and similar computer appliances whereas Austria and Germany intended to apply the reverse charge mechanism to all wholesale transactions exceeding a specific amount. In Germany, this mechanism would be unified with one of the two control models, either "Cross-Check" or "R-Check", as explained later on in the "Inspection and control measures" chapter (International VAT Association, 2007, p. 22).

The Commission perceived and assessed applications from Germany and Austria as being too general and poorly specified. Consequently, derogation requests for both member states were refused. The Commission's argument was that the implementation of derogations would not only cause additional difficulties and confusion for the tax authority and taxable persons but also increase chances for tax evasion. On the contrary, the Council did authorize UK's derogation request (European Commission, 2006d, p. 6).

An essential component of the VAT system is fractionated payment. It serves as a basis for the system's three fundamental features: (International VAT Association, 2007, p. 23):

- *the advance payment of VAT receipts;* The states can collect the consumption tax prior to completion of the economic chain;
- *self-policing of the tax;* Each active participant in the economic chain is required to obtain documentation from the preceding party. These records serve as proof of transaction activity and allow control over how tax is being generated during the course of the chain; and
- *security concerning the collection of VAT receipts*; In cases of tax evasion caused by an operator in the chain, the state only loses the amount of VAT equivalent to the VAT of the taxable person evading the payment. However, the entire amount of the tax on the goods and services will be lost if the tax is concentrated in only one link of the economic chain.

The reverse charge mechanism's major advantage is that if correctly applied, it eliminates any possibility of MTIC and carousel fraud occurrence during the course of the supply chain with the exception of retail stage. With no VAT charged and therefore none paid, its misuse is practically impossible. Revenue losses cannot be generated as there are no refunds of input VAT that has not been paid (Ludviksson, 2012, p. 11).

As reported by the International VAT Association, the application of the reverse charge mechanism is beneficial for the following reasons (2007, p. 23):

- an increase in receipts. It has been evaluated that in Germany, for example, additional EUR 3.8 billion could be accumulated, provided that the mechanism is combined with the "R-check" method;
- a 25 % decline in VAT losses made on account of company insolvencies, as stated by Germany;
- considering the fact that it does not demand any refund requests, it therefore does not discriminate between tax-collecting and zero-rated companies regarding VAT refunds. Furthermore, it also enables instant VAT recovery with no pre-financing needed; and
- an appropriate and correct usage of the reverse charge mechanism in other industry segments such as the construction business has been confirmed as being highly beneficial by both Austria and Germany.

Drawbacks of the reverse charge mechanism are stated in the Commission's ruling on Austria and Germany's demand for a derogation and involve the following (European Commission, 2006d, pp. 2 and 3):

- putting more strain on companies – in cases of VAT non-payment, the reverse charge mechanism requires that the financial risk as a consequence of such behaviour is to be transmitted from the Treasury to companies. The decision whether or not to charge the customer with VAT based on assessment of their validity is up to the company, which consequently becomes the financial risk bearer. However, such measures are contrary to the Lisbon objectives as they over-burden companies with excessive responsibility and financial costs;
- VAT diffusion – in member states, the majority of the VAT (approximately 80%) is paid by no more than 10% of the taxable persons in total. As a result of such (dis)proportionality, a certain amount of the VAT revenue is secured and the revenue authorities are therefore not required to establish a strict control system in order to accumulate and collect the funds;
- new and advanced types of fraud – Implementation of a generalized reverse charge mechanism is likely to trigger new structures of fraudulent behaviour. For example, the final links of the supply chain would probably disappear if additionally burdened by liability for tax payment. Furthermore, the reverse charge system should not be perceived as a response to so-called unofficial "black sales". When charging VAT at the final point of the supply chain, the motivation to acquire these black sales supplies will increase with the taxable person having to answer for the entire amount of VAT and no longer for the fractioned part only;
- putting more strain on tax authorities – With the application of the reverse charge mechanism, the numbers of control officials employed in tax authorities should increase quite substantially. Such a measure is necessary as the tax debt is dispersed over a greater number of taxable persons which automatically calls for additional supervision and control;
- the initial and investment costs of establishing and launching a new system can be quite considerable;
- the thresholds recommended by Austria, the UK and Germany would not be able to prevent fraud. Exceeding the proposed thresholds would make use of the reverse charge mechanism obligatory;
- in case of loss of optional payment in stages (fractionated VAT payment), an introduction of new supplementary responsibilities and duties for taxable persons is unavoidable in order to secure undisturbed and continuous tax revenue collecting;
- checking and verification of customers' status and the objectives of their purchase will become inevitable – the reverse charge mechanism can be applicable only if the customers are accordingly VAT registered companies;
- all companies will need to adjust their invoicing systems – depending on whether their customers are VAT registered companies or not, the traders will either have to work

with B2B and B2C invoicing systems or appropriately modify their existing billing systems;

- periodical submission of documents to the authorities – a register of trader's customers will need to be delivered to the tax authorities on a quarterly or monthly basis;
- continuous supervision of all active participants in the transaction chain – there is a risk that in some cases, not all transactions in a chain get to be verified instantly. Detailed control of the links in the transaction chain minimises possibilities of potential fraud opportunities;
- VAT identification number hijacking will still be possible; and
- certain tax free goods may eventually end up in another member state.

As already mentioned, the retail stage of the supply chain is still susceptible to fraud, regardless of numerous advantages of the reverse charge. Due to the breach of the fractionated payment principle, this level of the chain provides favourable circumstances for financial frauds involving larger amounts of tax (European Commission, 2009, p. 2).

As stated by the Commission, an appropriate implementation of a targeted and precise reverse charge mechanism can be highly beneficial for the member states, as long as its use is limited to certain sectors of the economy. However, application of such limited reverse charge system to a specific group of goods does not prevent fraud from shifting onto alternative goods and services that are not subject to this mechanism. When limiting the implementation of the system to a certain domain, an additional risk arises; the fraud can then be exported and passed on to other member states whose national legislation does not support these provisions. This demands serious assessment and consideration since any unforeseeable consequences that may arise from such fraudulent conveyance would most likely be severe. The majority of the tax and its payments are concentrated at the fraud-susceptible retail level, putting receipts of the member states at a significantly high level of risk when affected by the generalised reverse charge mechanism (International VAT Association, 2007, p. 25).

It had already been stated in the 1962 Neumark report that using retail tax as the only resource of turnover tax can be inconvenient due to reasons of fiscal methodology (International VAT Association, 2007, p. 25):

- supervision of a large number of taxable persons and small retailers, some of them with poor accounting skills and abilities;
- complex management of the preferential systems for smaller companies;
- the insolvencies of companies at the retail stage; and
- an increase in fraudulent opportunities, particularly when trading with no invoice as this allows distribution of goods amongst dealers that are not taxed, resulting in a decrease of VAT receipts and other taxes.

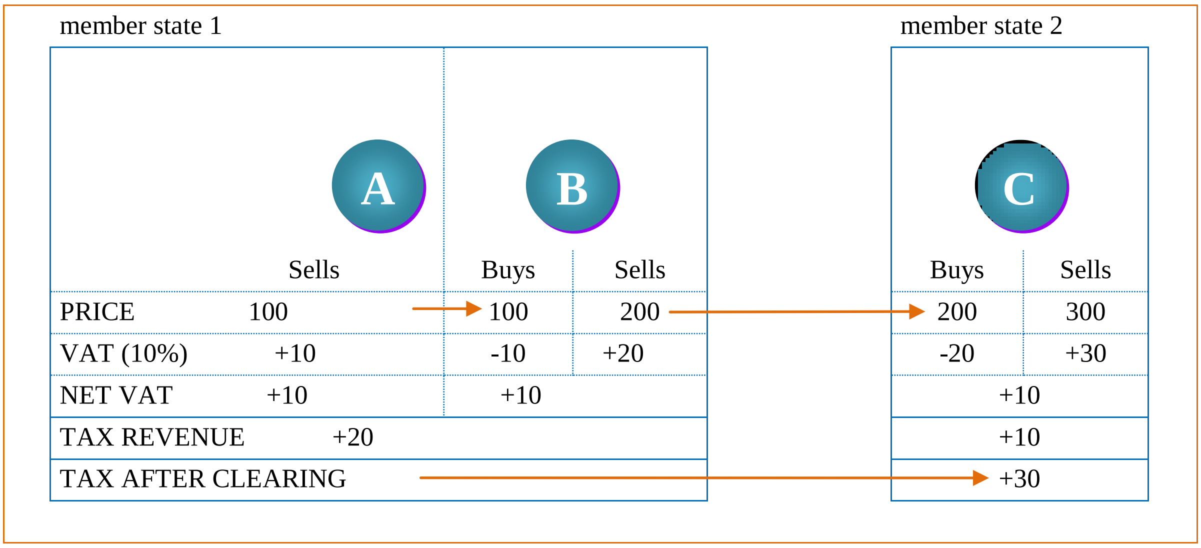
Via this method, the VAT becomes a Sales tax, a sort of retail tax which has shown to be relatively inadequate and inefficacious and is, in addition, a source of quite substantial tax avoidance. The IMF recognizes this tax as being significant for low (5% - 10%) tax rates only (Keen, & Smith, 2007, p. 22).

An estimate based on unofficial data presented in a report issued by the “Conseil des prélèvement obligatoires” implies that tax evasion rates can be as high as 30% in economies with applied Sales tax system. This indicates that a Sales tax can be a more powerful generator of tax evasion than VAT (International VAT Association, 2007, p. 26).

5.2 The origin principle vs. the destination principle

Ever since 1962, the Commission has advocated the country of origin system as the most appropriate arrangement for the single market. The system requires that all goods and services in the country where the supplier is founded are to be subject to the same standards and rates of taxation, irrespective of whether their purchaser is established in the same member state or not. Furthermore, the supplier is no longer obliged to check and verify the purchaser’s taxable status nor keep any record of the movement of the goods in question. The distinction in VAT handling between taxation at the point of destination and taxation at the point of origin is shown in the following diagrams. In order to simplify the matter, a 10% VAT rate is used in a related series of transactions. To begin with, Manufacturer (A) sells to Distributor (B), both located in member state 1. After the purchase, Distributor (B) resells the same goods or services to Distributor (C), situated in member state 2, who then resells them to final consumers (International VAT Association, 2007, p. 15).

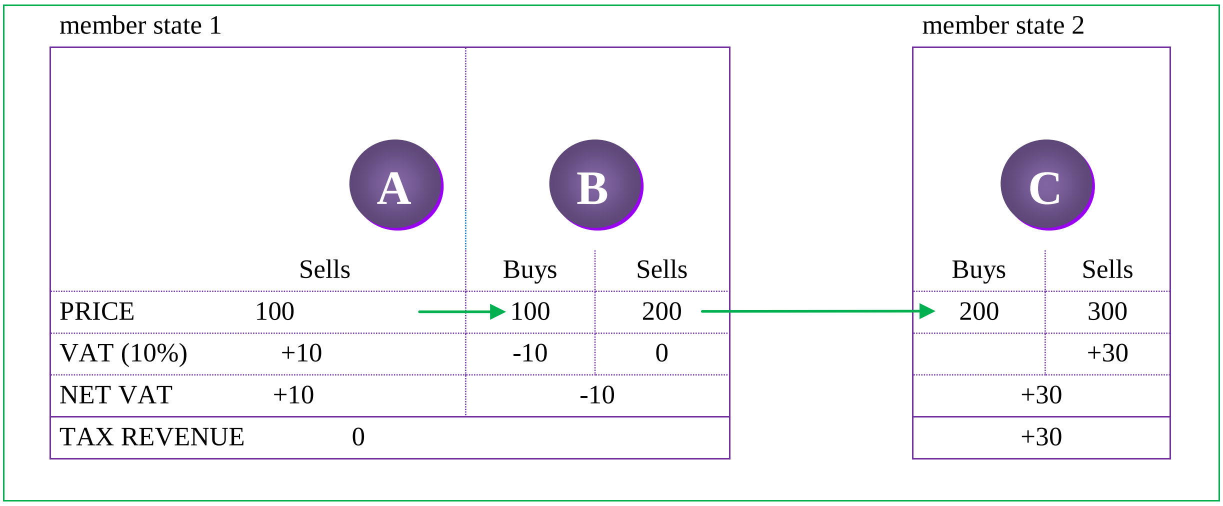
Figure 8. The origin principle



Source: European Parliament, *Options for a definitive VAT system*, 1995, p. 15, Figure 2.

According to the country of origin system's requirements, the trade from B to C will be subject to equal treatment as a domestic transaction and the VAT will be charged at the rates determined by member state 1. Furthermore, the 30 tax units shall be correspondingly apportioned between member state 1 and member state 2. With the assistance of a centralized "clearing system", this tax will then be transferred from member state 1 to member state 2 in which the goods and services will eventually be sold to final consumers. Via the clearing system, the revenue of 30 tax units in total will be ascribed to member state 2 (International VAT Association, 2007, p. 16).

Figure 9. The destination principle



Source: European Parliament. *Options for a definitive VAT system*, 1995, p. 15, Figure 1.

In line with the destination principle, the transaction involving goods sold from B to C shall be de-taxed. B will request a reimbursement of what it had previously paid to A, 10 input VAT units. Since the entire amount is relocated to member state 2, the net effect is a neutral setting for VAT objectives in member state 1. On its following sales in member state 2, C will be liable for VAT with the 30 unit taxation net effect on succeeding sales to domestic purchasers. In 1993, border controls were eliminated and the Commission suggested the adoption of the country of origin system as the most suitable adjustment to the new conditions. However, due to inadequate political diplomacy, a destination-based tax system was applied instead. Primarily, this system was meant to be transitional only and even though taxation in the country of origin continued to be the norm, the destination-based tax system was modified and adapted over time with an attempt to limit and minimize fraud, tax avoidance and competition distortion as much as possible. The country of origin system was therefore never applied. In present-day conditions, how can taxation in the country of origin positively affect VAT fraud prevention efforts? What are its negative effects? As already mentioned, the proposal for taxation in the country of origin was put forward in 1962 by the Neumark report. While awaiting the expected elimination of border controls, this was the only system at that point that would have been able to accommodate the establishment of a Common Market with no distortion of competition and yet under the same terms as a domestic market. Still, national legislative bodies should have adopted a more unified and harmonised approach in order to successfully actualize such a strategy, especially in respect of VAT rates. The transitional system, however, is essentially a combined system according to which particular transactions are subject to taxation in the country of destination and others in the country of origin (International VAT Association, 2007, pp. 16 and 17). The Commission argues that specific categories of VAT fraud could be reduced if not eliminated with the correct application of taxation in the country of origin system, accompanied by transferral of receipts to the country of destination (Parker, 2006).

International VAT Association (2007, pp. 17 and 18) points out several advantages of taxation in the country of origin system, especially taking into account the following:

- putting a stop to financial profits of carousel fraud via elimination of zero-rated intra-community supplies of goods;
- its simplicity, occurring spontaneously as an after-effect of legal security and legitimate expectation principles. Firstly, simplicity has a stimulating effect on willingness of tax payment which consequently lowers its recovery costs. Secondly, it enables the operator to be certain in advance of the exact amount of tax the customer is to be charged with;
- lowered costs of tax compliance regulation for companies. When under the country of origin system, the operator is required to conform to one tax authoritiy, one law interpretation and one VAT registration only, making the intra-community market much more accessible to smaller companies; and
- the reestablishment of the taxation system at all levels of the production, distribution and service provision stages, as suggested by the First VAT Directive.

Furthermore, International VAT Association (2007, p. 18) identifies the following drawbacks of taxation in the country of origin system:

- the need to establish a system which would be able to adequately support appropriate receipt allocation between the country of origin and the country of destination. It should call for the taxpayers to make direct payments of receipts to the country of destination;
- extra costs for companies, caused by the application of a "definitive" system. If these costs are at the same time accompanied by a reduction in compliance costs, its application is most likely to be justifiable; and
- the loss of tax sovereignty, as the system's major drawback for the member states. Due to the possibility of them suffering business losses when trading with other member states, the states cannot reduce or increase their VAT rates as previously, even though the receipts will eventually be returned to the state of consumption. However, provided that the member states would still be able to reduce or increase their VAT rates by a maximum of 2%, the impact caused by the loss of tax sovereignty could be somewhat

alleviated. This was the case with the floating rate of petrol excise amongst departments in France.

According to the Commission, a differential rate between member states that does not exceed 2 percentage points should not affect or in any way alter the functioning of the country of origin system. Currently, however, it reaches up to 10 percentage points in the standard rate which is a quite considerable range and is unlikely to scale down in the mid-term. Furthermore, the application of the reduced rates is non-obligatory and optional, which additionally contributes to the already existing perplexity caused by numerous derogations adopted by some member states (VAT Strategy 2006-2011, 2005, p. 4).

The barriers to accordingly align VAT rates and reallocate funds are still too great to be able to allow member states to reach a political consensus. Principles of the definitive system are most appropriate for the single market. The principle of the single currency was eventually adopted in 1997. It was not, however, instantly applied. The implementation of a definitive VAT system accompanied by the introduction of the euro would surely have overburdened the member states. Even though the system has proven to be successful in combating some types of VAT fraud, it appears unlikely that the member states will be able to reach a political agreement regarding taxation in the country of origin (International VAT Association, 2007, pp. 18 and 19).

5.3 Modifying the "transitional" system

The "transitional" system of taxation in the country of destination has shown to be the most appropriate political arrangement since the abolition of fiscal frontiers in 1993, although it did have to undergo a few modifications over the course of the years.

Currently, the main focus is being put on determining whether its further improvement can effectively combat and prevent VAT fraud. The most recent tax fraud prevention measures undertaken by the member states are as follows (International VAT Association, 2007, p. 19):

- the targeted application of the reverse charge system, however only for specific economic sectors;
- in affiliated transactions, the use of the "normal value" as the basis of tax assessment;
- in transactions involving taxable persons established outside the country of taxation, the application of the reverse charge system; and
- imposing joint and several liability upon any taxable person who knew or had reason to believe that all or some of the VAT due would eventually not be paid.

One of the aims of the measures listed above is to support member states in fighting fraud more effectively by strengthening their combating capacities. Moreover, these measures correspond to the legislation enacted by the ECJ, especially that in the Kittel case, the FTI judgements and the Optigen case (International VAT Association, 2007, p. 19).

Sustaining and improving the transitional system in order to combat fraud can be beneficial for the following reasons (International VAT Association, 2007, p. 20):

- the member states' sovereignty regarding harmonisation of measures and VAT rates may remain unaffected;
- goods and services are generally subject to taxation in the country of their consumption;
- the country of destination system is in line with the territorial competence of the tax authorities in charge of the fiscal receipts; and
- a substantial reduction in the formal procedures previously required for goods crossing the borders; VAT rates and rules regarding input tax deduction do not necessitate harmonisation.

Despite its further development, the modified transitional system would be characterised by the following drawbacks (International VAT Association, 2007, p. 20):

- a decline in the economic performance of European companies. The member states are adopting new measures very gradually and the companies' administrative costs have undergone substantial growth. Companies are also additionally financially burdened with high costs of operating in the intra-community market due to numerous expenses such as registration costs in each state etc. This negatively influences employment, consumer prices, company performances and several other factors which then altogether affect Europe's international business competitiveness;
- rather than simplifying it, further development only adds to the perplexity of the system. This contravenes the Lisbon Agenda, the global policies regarding VAT application set by the OECD, the First VAT Directive principles and the Commission's anti-fraud policy;
- the general principles of the Community's legislation are inconsistent with the measures that are required to efficiently combat fraud. Furthermore, non-established taxable persons are subject to nonstandard legal treatment with respect to their tax payment liabilities;
- some duties that should be conducted by the tax authorities are assigned to taxable persons. Even though taxable persons do get affected by anti-fraud activities, it should not happen on the account of fraud assumption based on fiscal receipts that were not declared by the person liable;
- due to intra-community transactions still being exempt, there is enough room left for carousel fraud to manoeuvre;
- the states' revenue authorities are not able to adequately supervise and control transactions made by their "domestic" taxable persons in other member states.

International and the Community's cooperation agreements in this domain are still not efficacious enough and therefore allow system abuse via particular deficiencies; and

- with a view to increase the budget of their domestic state, the tax authorities are inclined towards carrying out their audit duties regardless of whether they endanger other member states' tax receipts by doing so.

The formal procedures previously required for goods crossing borders have been simplified significantly with the implementation of the transitional system, resulting in better business competiveness, a reduction of delays and a substantial cost reduction with regard to the movement of the goods. Even though the system was planned to remain in force for a period of four years, it eventually entailed a sudden upsurge in VAT fraud. The main target of its abuse was the fractionated payments domain which is the least similar to the fundamental principles of the original VAT system. In cross-border trade, carousel fraud is motivated by the possibility to purchase "tax free" goods and services. The member states have tried to resort to temporary measures either by following the examples of Austria, Germany and the UK and therefore acquiring derogations or by searching for resolutions within the contents of the actual Directives. Such provisions may hinder the types of fraud that purposely target current deficiencies of the transitional system, however, whether they would in any way contribute to further development of fraud and create new major risks is not yet known. Nevertheless, some member states believe that the abolishment of the system would be regarded as a step backwards and would not be an appropriate measure at this point. What is required is a reliable mechanism that can support the system in fraud prevention, accompanied by a unified approach encompassing all member states (International VAT Association, 2007, pp. 21 and 22).

5.4 Taxing intra-Community transactions

The possibility of purchasing and supplying goods and some services free of tax within the EU appears to be the main disadvantage of the transitional system as it enables fraudulent VAT refund claims due to the gap in the VAT chain, caused by zero-rating of intra-community exports. This is, basically, one of the main features of carousel fraud. It is suggested in a report issued by the UK's Institute for Fiscal Studies that by removing the fundamental cause of missing trader fraud, a more advantageous long-term tactic could be achieved. Such an approach would be more expedient and beneficial than a mixture of resource-intensive enforcement actions and specifically targeted adjustments, which only provide short-term solutions instead of addressing the underlying issues. In addition to the latter, the Institute strongly advises that taxation of EU intra-community supplies at the point of origin should be reassessed as it was, in its opinion, dismissed too promptly in 1993 accompanying the elimination of fiscal borders (European Commission, 2007, p. 177).

The issue of re-establishment of fiscal borders has already been presented and reviewed in the "Country of Origin vs. Country of Destination" chapter, indicating that taxation at the point of origin as a solution to the matter is unlikely to reach a political agreement. However, the Commission has proposed a new, coordinated scheme for combating tax fraud where taxation of intra-community transactions would in some way be taken into account (European Commission, 2006e, p. 10).

The suggested strategy does not tend towards the country of origin system. It does, however, take out the financial motive of carousel fraud by applying VAT to cross-border transactions. This tax can be applicable at a 10% single EU rate or at the rate set by the receiving member state (International VAT Association, 2007, p. 27).

According to the International VAT Association (2007, p.27), the advantages of taxing intra-community transactions are as follows:

- limiting the financial profits of carousel fraud by withdrawal of the zero-rate tax scheme for intra-EU supplies;
- partially reinstating the system of taxation in all phases of production, service provision and distribution processes; and
- eliminating the need for specific declarations due to taxation of intra-EU supplies and consequently, reducing compliance and administrative burden on companies.

In addition to the above listed, the International VAT Association (2007, p. 27) also names the downsides:

- the reintroduction of fiscal borders, an act which is most likely to encounter disapproval from companies, especially during its initial phase;
- the establishment costs and expenses; and
- the obstruction of cash flow for companies which are liable to pay VAT before being able to reclaim/offset it.

The alarming extent of fraud is putting member states under a lot of pressure to act urgently and intervene by undertaking the best possible measures to address the situation. The existing conditions should be thoroughly examined and all possible solutions, regardless of their eventual unconventionality, properly evaluated. It has already been concluded that by making segmented and unsystematic readjustments with no proper coherence, the current transitional system is not likely to provide any lasting and effective solutions to difficulties caused by fraud. What seems to meet the requirements and standards of core principles of legal certainty, proportionality and simplicity is the suspension of zero-rating of intra-community supplies whilst keeping the fractionated payment system’s basic concepts. Integrated with other arguments mentioned later on in this paper, this method can serve as a reliable tool for combating MTIC-related fraud. Nevertheless, risks remain and so does the need for additional control. Other types of fraud could result from poor regulation of the VAT charged by the supplier; in case this tax does not eventually get paid over, fraudulent abuse such as invalid deductions of input VAT or deliberate insolvencies may occur (International VAT Association, 2007, p. 28).

5.5 Fiscal Substitution

By applying the method of fiscal substitution, tax can be concentrated in the early stages of the transaction chain. Furthermore, it allows a chosen operator to be liable for the entire VAT payment in the chain. The operator responsible for paying the VAT is an entity which is financially firm, adds the biggest value within the economic chain and is therefore desirable to choose. Auto manufacturing plants are a good example, as their dealers and distributors have a quite foreseeable and narrow margin. According to the method, the chosen operator is liable for VAT payment and will demand payment of two VAT amounts from his client. One amount is the VAT for the operation (VAT "per se"), which is calculated considering the value of the operation between the client and the person liable for paying the VAT. The other amount is VAT for "fiscal substitution" and is based on an "indicative value"[19]. It is deducted from the "per se" VAT of the operator. The client will pay this difference to the supplier who will then pay the tax to the state. In intra-Community transactions, the supplier liable for VAT payment pays the tax directly to the destination country. That is, the client will pay the transaction price and the value of the substitution VAT and shall not be subject to VAT in his sales transactions. The same applies to all following operators in the chain (International VAT Association, 2007, p. 28). Appendix 1 provides additional clarification of the Fiscal Substitution method.

The International VAT Association (2007, p. 29) lists the following advantages of this method:

- the tax is concentrated either in the strongest link of the chain or in the link with the highest value added, making the fiscal substitution method less risky than the reverse charge mechanism with regard to the member states' tax receipts;
- putting an end to carousel fraud by eliminating the ephemeral operator;
- a more direct cooperation between tax authorities and taxable persons;
- a decrease in quantity of taxable persons;
- improved solvency of the persons liable for VAT payment; and
- small and medium companies (hereinafter: the SMEs) are not impacted due to their predominantly retail level.

The International VAT Association (2007, p. 29) lists the following disadvantages of the method:

- the implementation of the method is a complex and costly procedure which requires fundamental changes to be made to the existing VAT system;
- the cost of financing the VAT cash flow; this is generally reduced to a minimum by the indicative value of the sale adopted compared to the actual value of the transaction;

[19] Indicative value is a market value charged to the consumer, which refer to the economic sector agreements and is usually up-dated or in accordance with alterations in the economy.

- the method does not affect the types of fraud in which purchases and sales are effected with no invoice; and
- the substitute deducts his deductible input VAT from the amount of VAT to be paid to the state. A refund of his deductible VAT (VAT on office equipment, real estate etc.)[20] must be requested by the substitute; hence there will be a rise in VAT refund requests.

This solution has its advantages and has already been put into use in certain federal type organisational structures, such as Brazil. However, to permit its practice in the EU, it would need to undergo numerous fundamental changes and substantial adjustments to the existing practices and legislation of the 28 European member states (International VAT Association, 2007, p. 29).

5.6 VAT Grouping

Upon consulting with the VAT Committee, the member states may be allowed to introduce a VAT Grouping measure into their VAT legislation. This measure allows financially or economically closely connected taxable persons to be recognised as a single taxable person. The application of the provisions is limited to companies founded in the same member state, as stated in Article 398 of the VAT Directive.

No significant drawbacks (e.g. inadequate flexibility or revenue losses) have been noted by those member states which permit domestic VAT groupings. Belgium, Spain and some other member states are implementing the measures in progress. A report made by PricewaterhouseCoopers for the Commission on the taxation of Financial Services estimated that, due to potential VAT costs, 86% of surveyed companies are hesitant to outsource operations (European Commission, 2005c, p. 111). Mandatory introduction of VAT groupings would scale down VAT flows between companies and the inherent fraud risks. Nevertheless, when making a comparison between companies operating in different member states, it can be seen that in cases where there is no cross-border VAT grouping, the company operating as a holding with subsidiaries would be at a disadvantage compared to the company operating as a single European company. This is because the holding must tax its intra-group transfers and a single European Company, applying the decision of ECJ in FCE Bank, is not liable for transfers between different parts within the same legal entity. This could either be a discretionary measure or grouping could be set as mandatory by the authorities in order to protect VAT receipts. It would successfully combat carousel fraud between affiliated parties and between member states. However, individual taxation systems have their benefits and drawbacks and no matter which system gets to be chosen, there is always a need for improvements such as better inspection and control measures (European Commission, 2005c, pp. 189-191).

The advantages of a VAT grouping include (European Commission, 2010a, p. 191):

[20] Excluding the non-deductible VAT on the transaction for which he is the substitute.

- a taxpayer will prepare and submit a single VAT return for all VAT Group members;
- a VAT grouping may reduce administration costs for taxpayers;
- the tax authorities can have a direct relationship with the VAT Group's representative as opposed to all Group members; and
- there is joint and several liability of all VAT group members for any VAT due from the representative member, which represents a benefit for the tax authorities.

The International VAT Association (2007, p. 31) lists the following drawbacks of VAT groupings:

- aligning the VAT grouping legislation among all member states would be a costly and complex procedure;
- to conduct fraud outside a Group structure, the fraudsters would use different vehicles;
- to prevent abuse, all member states would have to be very consistent in applying strict anti-avoidance provisions;
- with regard to services and their intangibility, fraud opportunities would be expanded to those outside a Group, where their cross-border movement is much harder to control; and
- fraud would shift to the retail or consumer level of the VAT chain.

Putting aside the legal obstacles regarding a VAT group that crosses borders, the key challenge for this solution to be efficient is the problem of recognizing members of a related group. It is quite complicated to track fraudsters who are skilfully camouflaging their activities via numerous brokers and buffers and the process of identifying related parties in a VAT group is a demanding task (International VAT Association, 2007, p. 31).

5.7 Joint and several liability

The anti-fraud law, known as joint and several liability, is one of the measures introduced to address the escalating problem of missing trader or carousel fraud. In the 2003 EU Budget the government introduced joint and several liability, meaning that traders in the supply chain could be held responsible, either individually or jointly, for paying any VAT liability fraudulently withheld by another member of the supply chain. But the FTI, which represents traders of computer chips and mobile phones, challenged the legitimacy of the rules under EU law. Anthony Elliot-Square, chairman of the FTI, welcomed the judgment, which he said showed the government could not arbitrarily apply unfair provisions against legitimate traders. Furthermore, unsettled VAT may, in some cases, become a responsibility of incautious and off-guard traders who may also be required to provide security for its payment. A High Court judge was considering whether to approve a "group litigation order" which would allow traders collectively to sue the tax authorities for damages over the way in which the clampdown on carousel fraud operated (Houlder, & Tait, 2006).

The effectiveness of joint and several liability has a legal and a practical dimension. Legally, it is defective for the following two reasons. First of all, it is applicable to ‘linear’ fraud but not ‘circular’ (‘carousel’) fraud and only if the supplies in question had constituted an economic activity, a note will be delivered to the person who is jointly and severally liable. With reference to the judgement of the Tribunal regarding Bond House cases, it shall not be done so in the event of ‘general circularity’, ‘specific circularity’ or a ‘ring fence’. A considerate amount of time and effort had been spent by the tax authorities on broadening the concept of ‘carousel fraud’ to its greatest possible extent. They succeeded in the Bond House cases, however, in nobody’s favour. Joint and several liability is currently not applicable to Bond House and similar cases, yet the tax authorities could strongly argue that they do have a case. On the other hand, joint and several liability could become admissible in such cases if the ECJ would act against the tax authorities. Secondly, there are two categories of goods which joint and several liability is limited to. Those are computer equipment and telephones. Goods for which there is demand in at least one member state and are easily conveyable and characterised by low volume and high value therefore accommodate such crime and provide an excellent opportunity for this type of fraud (Lasok, 2005, p. 3).

5.7.1 Two essential features

From the legal viewpoint, joint and several liability fails to address the following crucial elements of “MTIC” fraud (Lasok, 2005, p. 3):

- the frauds are capable of acquiring goods from another member state and eventually reselling them; and
- the frauds can acquire large amounts of money even before are the revenue authorities able to take appropriate action against them.

A deficiency in the structure of the VAT system allows the first feature. Specifically, intra-Community supplies of goods (from one member state to another) are zero-rated. Standard-rated are, however, their supplies within a member state. This type of fraud would not be able to subsist without such a feature in the VAT system. An intervention by the Community could settle the issue, although it seems that proper action is not to be expected. When accepting the system, the member states were aware of the fact that it is susceptible to fraud. The Commission of the European Communities has been insisting for many years to find a solution to the problem, however with no favourable outcome. The other feature mentioned above is the inability of the revenue authorities to act on time. In other words, the fraudsters are too fast for the authorities to identify them on time and keep track of them. Since the fraudsters are not able to endlessly continue with their fraudulent activities, MTIC fraud is a short-term illegal practice. In the Bond House case, the revenue authorities identified a specific fraudster at a fairly early stage. As noted, Bond House was unfamiliar with the trader in question and in fact never made business with him. Those traders which had actually dealt with the alleged dealer were not able to provide the revenue authorities with any useful information. Even though the authorities were unsure of the trader's activities, they failed to react on time and allowed him to flee with GBP 17 million. Therefore, when trying to spot and recognize fraudsters, joint and several liability is not a reliable source of support and assistance to the revenue authorities. To conclude, joint and several liability will in most cases only be applied to a trader that works directly with a fraudster. Most probably, when unaware of a fraudster's involvement in the chain at the time of executing the transaction, other traders shall not be held jointly and severally liable. This is due to the fact that, normally, a trader only knows the status of those business subjects to whom he is directly connected. It would be unreasonable to insist on burdening the trader with the responsibility of having to thoroughly check original sources of supplies and their final destinations when dealing with another trader (Lasok, 2005, p. 3).

Regarding the practical aspect, joint and several liability is, to a certain level, able to fight fraud. This is achieved by causing the traders to feel hesitant about dealing with newcomers to the market. Since MTIC fraud is a short-lived type of crime, the fraudsters are only able to carry out a certain amount of transactions as the risk of being exposed increases with time. Therefore, the fraudsters will remain "on duty" for a short time period before disappearing (missing traders) and eventually returning to the market as new companies with new identities. For this reason, newcomers to the market are the most probable suspects and the existent traders should check them thoroughly before starting business with them. On the other hand, market's long-established traders are not likely to participate in MTIC fraud. Therefore, joint and several liability will in all probability have a discouraging effect on them when having to decide whether or not to engage in fraud. A fraudster can falsify his documents in order to appear on the market as a long-established trader, however joint and several liability is not suited to cope with such conditions. It cannot be strictly claimed that joint and several liability will eliminate the attractiveness of financial gain. When applied to participants in the fraud, it can have such an impact. It is, however, created to encompass traders which do not engage in fraud and therefore do not make any financial profit on account of it. Joint and several liability is a punitive measure aimed at making the commercial environment protected from MTIC fraud as much as possible by discouraging legitimate traders from getting involved. Considering this, it can counter carousel and MTIC fraud to a certain extent, even without having to be put to use. Nevertheless, the positive after-effects of the threat posed by joint and several liability could easily be evaded by cunning fraudsters alternating to other fraud strategies or document forgery, such as, for example, "men of straw" (Lasok, 2005, pp. 3 and 4).

The reason behind introducing joint and several liability was a structural issue in the VAT system which needed to be fixed. Even though this issue could have been solved more efficiently by other methods, the member states still seem to be in favour of joint and several liability. In order to eliminate the cause of MTIC fraud, the VAT system would need to be revised and corrected and it appears that this is not what member states are willing to try. The only way in which joint and several liability seems to tackle the MTIC fraud issue is by obstructing the fraudsters. As a result, not only fraudsters, but also legitimate traders and their trades are being affected by this and discouraged. Furthermore, joint and several liability does not focus on the root of the problem which causes MTIC fraud. It is therefore not efficient enough in fighting it and is more prone to being circumvented by fraudsters. Last but not least, the legality of joint and several liability is arguable for numerous reasons (Lasok, 2005, p. 5).

5.8 Inspection and control measures

As a consequence of market globalisation, the revenue authorities are confronted with new task regarding control and inspection of taxable transactions with a view to combat fraud and tax evasion. Efficient functioning of the tax systems depends on the member states. Due to rising levels of tax evasion and fraud on an international scale, more intense cooperation is required. Not only among member states within EU but also among non-EU countries and the member states. In their fight against fraud, the revenue authorities are reinforced with modern and advanced technologies such as the cross-verification of electronic invoices, “R-check” and “Cross-check”. As a result of such measures, reinforced collection and administrative cooperation among revenue authorities is required. In order for them to maintain adequate control over the VAT system without making it more complex and at the same time ensure low compliance costs for companies, the adoption of new technologies is unavoidable. Germany has introduced both “Cross-check” and “R-Check” inspection mechanisms, while Chile, Mexico, Brazil and numerous other countries rely on electronic invoicing for control and inspection of taxable transactions (International VAT Association, 2007, pp. 31 and 32).

5.8.1 “Cross-check”

Germany proposed the “cross-check” mechanism within a cash-basis accounting model, according to which the VAT becomes payable by the supplier upon client’s transaction settlement. When the supplier then pays tax to the state, the client becomes entitled to VAT deduction. Regardless of the fact that the client’s payment to the supplier includes VAT in the price, the client loses his right to deduct as a result of a default in the supplier’s VAT payment. An electronic filing of an individual return is required for the cross-check mechanism, upon the supplier receiving the payment. Exclusively, operations exceeding the amount of EUR 5,000 in invoice and value of the payment, inclusive of all taxes, shall be required to be declared on an individual return (International VAT Association, 2007, p. 32).

The below stated data will need to be provided by the electronic individual return (International VAT Association, 2007, pp. 32 and 33):

- the VAT number of the seller;
- the VAT number of the purchaser;
- the issue date of the invoice;

- the number of the invoice;
- the value of the received payment;
- the amount of VAT;
- the payment date; and
- the payment type: cash, credit card, cheque...

The seller and the purchaser will have to file the return at the end of each month, specifying the number of executed transactions. Via cross-check, the VAT turnover return and the individual return can be compared. Furthermore, it also enables identification of yet unsettled transactions of the supplier's clients (International VAT Association, 2007, p. 33).

The International VAT Association states the following advantages of the "cross-check" mechanism (2007, p. 33):

- the creation of an alert signal for default on payments; in case of an ephemeral operator, the signal provides the tax authorities with a greater ability to react. It does not, however, always indicate fraud; a taxable person might just be behind time with the payment or the individual notification etc;
- the VAT paid by the seller can be compared to that declared as received by the purchaser;
- compatibility with the VAT fractionated payment system, as established by the First VAT Directive; and
- suitable to be applied to both destination-based and origin-based taxation systems.

The International VAT Association also lists its drawbacks (2007, p. 33):

- fraud can be conducted by issuing several invoices and payments not exceeding the threshold;
- it is unreliable as a means to detect fraud and can only be relied on for identification of a default. Verification of failures and fraud in the system is the tax authorities' responsibility;
- an increase in compliance costs for companies which are, depending on the number of their clients, required to file several separate returns a day. This will most negatively affect SMEs that currently enjoy the benefits of certain simplifications such as filing annual returns etc.; and
- a decrease in companies' cash flow in cases when the required time of VAT payment to the state coincides with the time of the individual return for transactions exceeding the threshold. In comparison with the currently used method, this will primarily have a negative impact on SMEs.

Due to its flexibility, the cross-check mechanism is employable both in destination-based and origin-based systems of taxation. Even though it did prove to be beneficial for numerous reasons, such as being a "warning notice" for tax authorities, it is not short of drawbacks. For example, legitimate traders are forced to wait for the suppliers to settle the VAT before becoming entitled to a deduction themselves, not to mention disrupted companies and, last, but not least, costs. Therefore, the eventual benefits of the system may be outbalanced by its potential drawbacks (International VAT Association, 2007, p. 34).

5.8.2 "R-check"

Germany proposed the "R-check" system to assure the information flow to the revenue authorities regarding domestic transactions between taxable persons, related to the reverse charge mechanism, and which Germany was seeking a derogation for. Under the reverse charge mechanism, the chain's economic transactions are to be taxed all at once, at the retail stage. It can only be applied between taxable persons when the recipient is entitled to a 100% VAT deduction. Via R-check, the supplier is able to validate the client's status on time, using a credible computerized method. This is done by confirming the validity of the client's name, address and "R-number". In addition, the seller must, via "R-return", regularly and timely communicate all "reverse charge" transactions to the revenue authorities.

The return must state the following (International VAT Association, 2007, p. 34):

- the VAT number of the seller;
- the client's R-number;
- the number of the invoice; and
- the date of the invoice.

Benefits of the R-check system are as follows (International VAT Association, 2007, pp. 34 and 35):

- the "R-check" is vital when applying the reverse charge mechanism for checking the exemption of a transaction against the quality of the client; and
- it provides real-time notifications regarding the validity of the client's R-number.

Drawbacks of the "R-check" (International VAT Association, 2007, p. 35):

- it is a very limited method as it is effective in preventing only one type of fraud, the providing of a false R-number or VAT number;
- an increased cost of compliance for companies as a result of the individual returns for the transactions, affecting mostly SMEs;
- the initial cost of EUR 2 billion;
- EUR 5 billion operating costs for the tax authorities; and
- EUR 200 million operating costs for German companies annually.

The R-check system refuses to handle undisclosed transactions and will not deal with the potential hijacking of numbers. It will require significant changes to the current VAT system with quite substantial costs to governments and companies (International VAT Association, 2007, p. 35).

5.8.3 Cross-verification of electronic invoices

China and Korea have been using the cross-verification method of invoices since 1970. With the progressive development in data processing, a new incentive has been given to combating fraud via means of fiscal control. In order to reduce fraud, Chile, Brazil, Mexico and other Central and South American countries have been successfully using the benefits of innovative technologies with a view to set up a well-established cross-verification method of electronic invoices. The general objective of cross-verification of electronic invoices in Brazil for example, is to reduce and simplify companies' administrative costs, especially those regarding registrations in different countries, returns on turnover etc. Computer resources are already used in accounting and bookkeeping by the vast majority of medium-sized and large companies. What makes electronic invoice issuing so appealing is the simplicity of data processing usage (Harrison, & Krelove, 2005, p. 6).

The system operates as follows (International VAT Association, 2007, p. 36):

1. A company issues a digitally certified invoice to the recipient and sends a copy to the client's state tax authorities and another copy to the supplier's state tax authorities.
2. This invoice is "approved" by the supplier's tax authority in real-time, which allows the supplier to carry out the delivery without having to pay the VAT at that moment[21] and the recipient to deduct the VAT.
3. The supplier's member state's authorities verify the status of the supplier, its integrity regarding VAT payment and the existence of the deductible VAT, which can be compensated with the VAT of the respective transaction, all in real-time.
4. After applying this method to all transactions, the information system of the tax authorities can identify the invoices received by a company in respect of its purchases and the invoices issued by a company in respect of its sales.
5. The companies are therefore no longer obliged to provide turnover returns.
6. Electronic invoicing uses a harmonised model which encompasses all the data required such as description and quantity of the goods, and necessary information regarding controlled goods that are potentially damaging to the environment[29] etc.

Cross-verification of electronic invoices is advantageous for the following reasons (International VAT Association, 2007, p. 36):

- reduced costs for companies as a result of simplification of compliance obligations;

[21] The VAT will be paid by the company at the end of either one-month or two-week period.

- the tax authorities' improved ability to react upon potential fraud identification. Public revenue protection measures are taken in real-time: informing the client that the VAT is non-deductible, establishing the recipient's responsibility, advance payments for transactions etc;
- the companies' positive approach towards its implementation due to the benefits it brings them, particularly reduced unfair competition caused by fraud and reduced administrative cost of the tax;
- an environmental measure to reduce paper use; and
- an increase in the client's company legal security: prior to making a payment to its supplier, the company knows that the deductible VAT of the transaction will not be deemed questionable by the revenue authorities on account of fraud by the supplier.

The drawbacks of cross-verification method are the following (International VAT Association, 2007, p. 37):

- not all types of fraud are prevented by this method. It excludes the black market or purchasing and selling with no invoice;
- substantial initial costs are required in order to successfully implement a cross-checking solution. Necessary modifications to wholesale, in particular, would change the existing business practices in the EU;
- a successful initial implementation of an effective cross-verification system would require its long-term set-up;
- a successful actualisation of the system would require a highly efficient and integrated information system encompassing tax authorities of all member states; and
- when implemented across the broadest possible base of economic operators, the use of cross-verification as a tool against VAT fraud would be at its most effective. Since it would be highly unlikely for all companies to have the required technology for interaction at their disposal, many of them would fall outside the area of operation.

Electronic cross-verification is possible only if the appropriate technology and systems are used by both the supplier and the customer. However, this applies to well-established and large operators which are less susceptible to fraud involvement. Even though it does have the potential of becoming an important anti-fraud instrument, this can only be achieved if its use is obligatory in all member states. Considering the costs which would accompany such widespread and regular use of the system, it does not appear to be a satisfactory alternative to the current situation (International VAT Association, 2007, p. 37).

5.8.4 Traditional control measures

Besides the above mentioned new technologies used in the domain of control, traditional control methods should certainly not be disregarded. They should, however, be readjusted in order to achieve their optimal effectiveness in combating fraud and include, amongst others, the following (International VAT Association, 2007, p. 39):

- more rigorous checks on companies wanting to register for VAT;
- more rigorous checks on VAT refunds; and
- random checks on transported intra-Community supplies of goods for identification of undeclared transactions.

There have been proposals to introduce VAT representatives anew, as it was the case before the 2000/65/EC[32] Directive was put into effect. However, this might turn out to be a step backwards as it does not quite comply with the Treaty of the Lisbon. These proposals were initiated in order for the national tax authorities to obtain a greater degree of security and certainty.

The advantages of this suggestion are the following (International VAT Association, 2007, p. 39):

- by blocking their initial stage of a VAT registration, fraudsters can be stopped from entering the VAT system; and
- relatively fast results can be obtained by deployment of such traditional measures.

Nevertheless, these traditional control measures are accompanied by the following drawbacks (International VAT Association, 2007, p. 39):

- numerous legitimate traders and companies could be burdened with excessive financial strain; and
- these measures were suited to address certain actual issues, as fraudsters soon discover new paths in order to continue with fraud.

Exposure of VAT registrations, intra-EU traffic and repayment claims to further controls provides tax authorities with an efficient instrument to combat specific categories of VAT fraud. The application of these measures, however, should not be inappropriately misused with regard to a legitimate taxpayer and his rights. Furthermore, if these measures are applied in only a few member states, the impact of the controls weakens at the macro-economic stage, transferring the fraud risks to other member states and reducing the overall efficacy. The right balance must be found when applying the traditional control methods. It should be based on appropriately implemented and coordinated measures, applied correspondingly in all member states (International VAT Association, 2007, pp. 39 and 40).

5.9 Administrative cooperation

Nowadays, fraud has become a global issue and is no longer a threat limited to one country only. In order to reach their goals, fraudsters use the existing cooperation gaps between the states. Following this, the revenue authorities should contemplate all possible tools before deciding to increase the burden of tax compliance for taxable persons. This should include improving the cooperation between tax authorities of member states and non-EU countries.

5.9.1 Intra-EU administrative cooperation

A common system of administrative cooperation and information exchange among member states' authorities was introduced by the EU in 1993. Its main objectives were to assure the correct VAT application and to fight fraud. Regulation (EC) 1789/2003 is the legal base for administrative cooperation in the domain of information exchange and Directive 2001/44/EC for assistance with collection. Mutual assistance regulation encompasses the following key principles (International VAT Association, 2007, p. 40):

- to clearly specify the rules on facilitating exchange of information and VAT investigations;
- to bolster direct cooperation between different member states' tax officials, whilst the central control offices retain their pivotal function;
- to prescribe the exchange of spontaneous information between member states; and
- to prescribe the exchange of specific information concerning intra-Community trade, via VIES.

Additionally, in 2006, an extensive Risk Management guide was published by the Commission, originally created by the Fiscalis Risk Analysis Project Group and based on findings made by different tax authorities' tax officials. The main objective of this guide was to ensure a common ground for decision handling within tax authorities (European Commission, 2006a, p. 6).

The Commission's feedback regarding the legal framework of information sharing is positive, even though it does imply that, in terms of progress, insufficient efforts have been made by the member states. To specify, administrative cooperation arrangements are not in line with the amplitude of intra-Community trade and the potential of new possibilities is not fully used. Regarding fighting VAT fraud, it is crucial that immediate access to information is ensured. It is therefore necessary to consider the employment of more effective information exchange methods, especially with regard to the latest technological advancements and equipment used by traders. Automated exchanges among member states should be more exact and more frequent and their access to national databases more direct. These improvements could be implemented along with the required upgrading of the VIES (European Commission, 2006b, p. 4).

The member states allude to the language problem, lack of knowledge in handling the cooperation procedures of their tax audit employees and insufficient human resources. As a matter of fact, administrative assistance staff contributes to the tax receipts of all the other member states except those of the state that actually pays them. It is not easy to evaluate the levels of indirect profit which result from reciprocity, thus explaining the lack of personnel. Moreover, the financial well-being of companies burdened with back taxes of other member states will be compromised. Member state of their establishment is the one responsible for bearing the indirect after effects such as reduced investments or staff reduction. Last but not least, companies pay taxes only to the member state of their establishment. Indirectly, this proves to be beneficial for the state as the funds remain within its national economy. These examples seem to somewhat explain why the tax authorities seem to be inert in their approach towards more intensive administrative cooperation, which should, however, under no circumstances be regarded as a justification (International VAT Association, 2007, p. 41).

This issue may be resolved by the following solutions (International VAT Association, 2007, p. 42):

- introducing a surveillance system with a view to provide secure and efficient assistance to counterparts of member states;
- setting up financial incentives by the member states;
- introducing bonuses for the inspectors, based on the income of their annually collected receipts within the given international scheme of cooperation; and
- organizing a multi-jurisdictional community tax authority unit, comprising of representative officials from each state and additionally authorized to carry out seizures of property and make visits.

The "administrative culture" of the community is in fact an outcome of the tax authorities' progressive integration, which would not be possible without the Community financial incentives and multilateral audits. Effectively, financial bonuses added to salaries of participating officials would in turn minimize language issues and intensify the efficacy and usage of the resources available. These bonuses could be drawn on a fund based on payments of back-taxes which arise as a result of application of mutual assistance arrangements. The member states will need to jointly agree on the legal framework within which such intensified cooperation could operate, possibly based on the European Anti-Fraud Office (hereinafter: the OLAF) arrangements (International VAT Association, 2007, p. 42).

5.9.2 Administrative cooperation with non-EU countries

With tax avoidance stretching beyond the external borders of the EU, the importance of developing the external positions of administrative cooperation is becoming more and more evident. Due to the increasing globalization of the services market, electronic commerce and the increasing number of companies founded in non-EU countries involved in carousel fraud, the Commission points to the need for international cooperation with reference to VAT. The member states' ability to actively participate should be improved, possibly via a well-prepared coordinated strategy by the Community. An eventual likelihood of a convention should not be excluded either. Fiscal transparency in non-EU countries should be increased for direct taxation to be correctly applied. By doing so, the member states would obtain access to relevant information. Furthermore, tax regulations in non-EU countries and the appropriateness of their application should be thoroughly examined and supervised, especially when cooperating with international organisations. In most cases, cooperation between the member states and non-EU countries is regulated via bilateral agreements. Since these agreements have failed to give satisfactory results, the Commission is seeking to establish a more effective approach to the Community's cooperation with non-EU countries (European Commission, 2006b, pp. 7 and 8).

5.10 Technological solutions

As MTIC[22] fraud is technology intensive it requires a technology intensive solution in order to properly address the issue. A report released by press reporters in the early 2000 offered an insight into how effortless it was for fraudsters owning a laptop to successfully turn the carousel. At the time, MTIC mostly focused on computer chips and mobile phones. Even as little as 10 minutes is all it takes to turn the carousel and the funds can be acquired in only 30 days, with the carousel running round from 5 to 300 companies. As much as GBP 200,000 can be "obtained" in each spin. The money travels very fast; the longest period of time it remains in a bank account is 2 hours. It is therefore hard to comprehend the magnitude of the fraud (Cobain, & Seager, 2006). In that period, MTIC fraud had undergone a process of transformation, changing from a fraudulent activity which predominantly engaged in cross-border movement of goods within the Community to an activity whose function is primarily based on technology. The fraud would be done via laptops while the goods would stay in customs storehouse (Ainsworth, 2011a, p. 1).

In 2006, MTIC changed its focus once again and started to target services such as VoIP[23] and carbon dioxide (hereinafter: the CO2) permits. Investigations carried out and covered by press claimed that this type of MTIC is even simpler to accomplish. In these instances, not only the movement of the supply was digital but also the supply itself, with respect to VoIP minutes and the CO2 permit. The BlueNext exchange fraud was mostly carried out by fraudsters operating from their laptops in cafeterias in Paris. By attacking the services,

[22] With missing trader fraud moving into services, the term MTIC has become outdated as the fraud is no longer limited to intra-Community trade. The term should be corrected to MTIC/MTEC, where MTEC stands for missing trader extra-Community.

[23] VoIP is an abbreviation for Voice over Internet Protocol which is a general term for a group of transmission technologies dealing with the delivery of voice communications via IP networks such as the Internet. There are retail and wholesale markets for VoIP. Although the market is being driven by retail demand, major areas for VoIP MTIC and MTEC fraud are in the wholesale market (Ainsworth, R., 2010, p. 10).

MTIC developed into “MTEC” or “extra-community” fraud (Ainsworth, 2010, pp. 5 and 6).

The tax authorities also shifted and started to track the money. For example, the majority of the funds the UK was chasing were found to have been transferred to numerous bank accounts at the offshore First Curacao International Bank (FCIB). Eventually, FCIB was closed down as it was no longer capable of processing payments due to undergoing criminal investigations regarding VAT fraud. The fraudsters’ response was, as expected, digital. With the development of internet payment platforms, huge amounts of money could easily be transferred. These platforms quickly became the fraudsters’ favourite method for moving the funds. They do not operate within the normal channels and are not exposed to traditional banking surveillance. Furthermore, with money remaining within, they are not easy to close down. The supply, its movement and its funding had all become completely digitised in MTIC/MTEC fraud. It is very difficult to track down any facts in the digital system as they disappear when pursued. For this reason, MTIC/MTEC fraud should be foreseen and accordingly addressed before causing irreversible damage. Even though technology does generate this type of fraud, it is at the same time its most efficient countermeasure (Ainsworth, 2011b, pp. 2 and 3).

Since 2007, the following three different technology-intensive MTIC/MTEC fraud prevention solutions have been proposed: “certified tax software” (D-VAT), “real-time VAT” (RTvat) and “VAT locator number” (VLN). D-VAT provides a secure VAT remission system via certified tax software and trusted third parties. These third parties are service providers, standing between tax authorities and companies. They remit the VAT due by their clients and file the VAT returns for companies as well as guarantee the payment of the tax due and the accuracy of the return. RTvat, on the other hand, concentrates on securing the VAT elements of each transaction while VLN enables tax authorities to track individual transactions. Both of these two proposals, RTvat and VLN, implicate substantial levels of government control, with central computer systems tracking every payment (RTvat) and every transaction (VLN). There is no central tracking with D-VAT, simply an assurance is provided that every transaction is reported accurately and completely as the tax reporting systems are guaranteed and certified. In addition, both D-VAT and VLN proposals put a great deal of effort into keeping the operating of the current EU VAT system fundamentally unaltered. The RTvat proposal, however, is presented as an origin-based VAT system and it requires EU VAT system adjustments regarding the time the tax becomes chargeable and deductible. Furthermore, it also performs quite effectively as a destination-based system. To conclude, the only way to efficiently prevent missing trader fraud within the member states is by making the systems obligatory for all companies (Ainsworth, 2011b, pp. 3 and 4).

5.10.1 VLN

The functioning of VLN within the EU is explained in the following example. If a UK-based Company A supplies goods or services to Company B in France, Company A will zero-rate[24] the transaction and then request a VLN from the UK tax authorities' central computer system. The VLN received in return will be VLN-1 which contains the necessary elements of Company A's invoice. Taking into account Company A's size of the current transaction, its regularity and the company's compliance history, the UK revenue authorities will carry out a risk assessment and then issue VLN-1 in case they determine that Company A is a low-risk exporter. The French VAT on the intra-Community acquisition of goods will then be accounted for by Company B.[25] When seeking to make an onward supply of these goods to a French Company C, Company B will request a new VLN for the subsequent transaction and thereby deliver the necessary elements of the invoice, including a copy of VLN-1, to the French tax authorities. Upon performing a risk assessment of the request, the French tax authorities will issue a new number, VLN-2, which Company B is required to include in the invoice.[26] When Company C receives the invoice from Company B, it should verify the validity of VLN-2 before paying the amount of VAT to Company B. By paying the VAT to Company B without checking VLN-2, Company C is at risk of being denied the right to deduct the VAT in case there is no VLN on the invoice or the VLN stated is not valid. VLN-2 enables the tax authorities to reconstruct the entire commercial chain as it contains information from the transaction between Company B and Company C, as well as information from the transaction between Company A and Company B. Because Company C will be notified about its deduction right being put at risk in case it fails to verify the validity of VLN-2, the system will become self-enforcing with known sanctions, not simply self-enforcing as a matter of good accounting practice (Ainsworth, 2011a, pp. 5 and 6).

Under this regime, due diligence is directed at the VLN. In case validity of VLN-2 is confirmed, Company C will be assured it can deduct the VAT it has paid to Company B. If the tax authorities are suspicious about the transaction's regularity, they may prevent the payment of VAT from Company C to Company B. Furthermore, by rejecting the VLN request, the tax authorities may also prevent Company C from deducting the VAT in case it has already paid it. However, this does not automatically mean that the commercial transaction will definitely be blocked, although the customer and the supplier will be notified about some other arrangement being required for the VAT payment. In cases of VLN irregularities, the automatic response of the following trader in line is to pay the supplier the VAT-exclusive price for the supply and to pay the VAT to the tax authorities

[24] In the case of services, UK VAT is not applicable because the place of supply will be in France.

[25] In the case of services, B will account for VAT on the value of the services under the standard reverse charge mechanism.

[26] Two options are available in case the onward supply consists of multiple purchases: either an aggregate invoice with an aggregate VLN can be issued or separate invoices for each part of the supply (each with an individual VLN) could be issued.

directly.[27] This payment will be allowed by the VLN system and both parties will receive receipts from the tax authorities. This is perhaps the only action which allows the customer to quickly secure a follow-on VLN for re-supplying the goods or tradable services. Missing-trader fraud is eliminated as there is no deductible VAT ever paid to a company that makes supplies with no valid VLN. A significant drawback of the VLN is its granularity. VLN associates individual goods and services with a discrete number, as the objective is to track specific mobile phones or computer chips throughout the entire commercial chain. Theoretically, it is possible for a mobile phone sold by a retailer to be traced back to a batch at a wholesaler and then to the shipping container at the warehouse of the distributor and, finally, to the manufacturer’s lot number. Furthermore, every mobile phone contains particular components, such as a SIM card and a chip, which also have a chain of VLN numbers that would necessarily be integrated with the VLN of the mobile phone while passing through the commercial chain (Ainsworth, 2011a, p. 6).

The inconvenience of the VLN system’s granularity can prove to be particularly troublesome not only at the production stage but also at subsequent stages of distribution of the final products. This especially applies to transactions concerning standard products the supplier purchased from different sources and stored together in a large container, tank or silo or where the supply involves several goods purchased from different sources. According to the VLN system, individual goods and services may be required to have their own VLN number which the subsequent suppliers must track. Regarding the bulk products, it would be extremely difficult, if not impossible, to ascertain the purchase from which the resupplied goods originate. Since it would be impossible to achieve such digitisation of all goods and services in the economy, the VLN system may need to be restricted to the market’s suspect parts. It is also not clear whether the tax authorities are able to effectively conduct risk assessment for the purposes of issuing a VLN (Ainsworth, 2011b, p. 7).

5.10.2 RTvat

In certain aspects, RTvat and VLN are both the result of the same concerns. However, the application of the VAT withholding mechanism is not restricted to suspect transactions and will become the new standard. Under the VLN system, each supply is digitally tagged and traders with no valid VLN are penalised for paying VAT to their suppliers. Under the RTvat system, however, each payment involving a VAT component is digitally sequestered and the possibility of the supplier receiving VAT from his customers is therefore eliminated. Besides making two considerable structural changes to the VAT system, RTvat requires radical procedural adjustments. First of all, the VAT liability of the supplier changes to the date upon which he receives payment from his customer and the customer’s right to deduct input tax changes to the date of paying his supplier. There are no changes made to the supplier’s liability itself. What changes is the collection of the tax, which is automatically linked to the customer’s transaction settlement. Second, pursuant to

[27] This withholding mechanism is actually the operating principle of RTvat. It is, however, applicable only in incidental cases.

Article 402 of the VAT Directive, which stipulates that the definitive system for VAT in the EU shall be origin-based, the proposed form of RTvat is an origin-based tax system. It could, however, be a destination-based system just as easily. The most distinguished feature of RTvat is the procedural changes. Under RTvat, it is only the VAT-exclusive price that the suppliers receive for their supplies as the VAT amount is automatically deducted from the customer's payment and electronically forwarded to the revenue authorities by the supplier's bank, rendering it necessary for the transaction to be settled via Electronic Funds Transfer (hereinafter: the EFT). After receiving it from the supplier's bank, the tax authorities can refund the deductible VAT to the customer through EFT on the same day.[28]

The payment system used by RTvat for VAT collection is very similar to that of the credit card industry.[29] Moreover, when final consumers make payments to retailers by debit or credit cards, mobile phones or other kinds of "plastic money", the VAT is automatically deducted and directly forwarded to the revenue authorities.[30] Supposing that the RTvat system is adopted by all member states, each state would be connected into a network of 28 identical servers used as centres for communication and fund transfers among them. An individual server owned and operated by each member state would process all its intra-Community and domestic transactions. It is practically impossible for missing trader fraud to exist under RTvat as no VAT received from a customer is ever held (on the government's behalf) by a company. Apart from retail transactions for which the customer pays in cash and not by credit cards or other types of plastic money, a supplier cannot go missing with the VAT in hand (Ainsworth, 2011b, p. 8).

If the RTvat collection mechanism was destination-based and the customers' payments were split up by their bank, it would function even more efficiently. The tax authorities of a member state would not have to refund the VAT to customers established in another member state. In case of cross-border supplies, application of destination-based RTvat would require the suppliers to know the VAT applicable in the member states of their customers. This should not pose any difficulties and, in circumstances where it is not clear whether the supply shall be standard-rated or zero-rated in the member state of destination, in B2B relationships, the supplier may simply charge the standard rate since the customer can deduct the VAT anyway. As a drawback of the destination principle, companies may be required to file multiple VAT returns in multiple member states. They should not,

[28] As a settlement-based system, payments in cash and by cheque cause a delay in the refund mechanism because they delay the payment of VAT to the revenue authorities.

[29] The rules of numerous non-EU jurisdictions are quite similar to RTvat. They apply them, however, only in cases of debit/credit card payments. In Ecuador, for example, the credit card companies are required to remove 30% of the VAT from all payments for taxable purchases made by debit/credit cards and forward it directly to the tax authority. The rules are similar in Colombia, where 75% of the VAT on all debit/credit card payments is remitted.

[30] By shifting to the real-time collection of VAT, the key change is that the tax is collected and remitted at each individual transaction at the time the customer settles payment of the transaction with the supplier. The tax element contained in B2B transactions settled via EFT between a supplier and a customer would be split off by the payment service provider and remitted directly to the tax authorities.

however, be required to file VAT returns regarding transactions settled via designated bank payment channels and processed by the revenue authorities (Ainsworth, 2011b, p. 9).

Even though RTvat is theoretically applicable throughout the EU, low-value transactions and transactions subject to the margin scheme should be excluded from the compulsory system. RTvat's originality, simplicity and workability would make it remarkable if it had stopped at this point.[31] Besides effectively preventing missing trader fraud, RTvat also successfully fights other kinds of fraud such as suppression fraud.[32] The RTvat proposal, however, goes further. Instead of relying on the related invoices as a basis for splitting up payments, the RTvat system obtains the required data from the supplier's business records, meaning that every time the supplier receives payment for a transaction, a part of his business records gets audited. This is enabled by the Tax Authority Settlement System (hereinafter: the TASS) as a part of the tax authorities' computer system.[33] In this way, RTvat may be overreaching. It might become involved in security issues and data collection it cannot properly manage. The content and scope of the data in the TASS is not clear. According to the OECD, a quality remote audit and fraud detection is possible at 320 data points in its Standard Audit File-Tax (hereinafter: the SAF-T). Such criteria cannot be met only by specifying the VAT identification numbers of both parties and identifying all intra-Community transactions. Furthermore, RTvat would need to address two security-related issues if it gathered SAF-T quality data from all EU companies. Firstly, its data would need to be thoroughly protected from external threats during their transmission and retention. Secondly, it would need to ensure that, before they arrive, its data have not been tampered with. The RTvat proposal does not address these issues. A system for secure data recovery would need to be developed by RTvat in order to provide SAF-T quality real-time transactional data. Such systems are now available and are able to gather data for all taxable transactions, store them securely on site, encrypt and digitally sign it, and then transmit them to a remote audit location. They enable SAF-T quality and real-time data transmission, either immediately after the completion of the transaction or on a daily basis.[34]

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[31] A considerable part of RTvat's operating principles have been considered in the 'Mittler Model' introduced at the Tax Policy Conference of the Ifo Institute for Economic Research in 2003. However, RTvat works with money whereas the 'Mittler Model' with exemption certificates and without involvement of the banking system. In comparison with RTvat, the operating costs of the 'Mittler Model' are much lower but the model is not in line with the principle that VAT is determined by the nature of the supply and not by the status of the customer. Moreover, fraudulent exemption certificates may cause difficulties as the government is not provided with an enforcement mechanism by which a taxpayer's funds could be held, not even for short time periods.

[32] Suppression fraud is based on the manipulation of sales data by means of zappers and phantom ware applications installed in electronic cash registers (ECRs).

[33] The performance of TASS can reportedly go beyond settling VAT liabilities. Its highly developed Fraud Analysis and Security Tool (FAST) provides the tax authorities with an advanced mechanism for identification of irregular transactions. The system identifies 'suspicious' traders, which can then be marked for further investigation and the input VAT refund held off until the query is resolved. It provides the traders with applicable VAT rates for all goods and services within the EU and enables a fast and hassle-free submission of data with every settlement. The revenue authorities are provided with real-time reports identifying all EU intra-Community transactions and containing VAT numbers of both parties.

[34] If a simultaneous transmission (transmitting to a remote location during the process of completing B2B and B2C transactions) slows down a transaction, it may cause inconvenience to businesses.

This technology was developed to protect electronic cash registers from suppression fraud and to ensure a secure transmission of critical tax data to the authorities for a remote audit. It can be applied (B2B and B2C) to provide the authorities with the real-time database necessary for closing the VAT gap in areas other than missing-trader fraud (Ainsworth, 2011a, pp. 9 and 10).

5.10.3 D-VAT

Exposure to specific types of fraud and other irregularities can be limited by the use of certified tax software and certified service providers (hereinafter: the CSPs). If correctly applied, certification mechanisms could be used to reinforce VAT systems. In the US, the use of third parties as service providers is very common. They provide their customers' tax returns, guarantee and settle their customers' tax liabilities and provide other compliance services. Under D-VAT certification, the tax authorities will develop a testing regime for the certification of enterprise-level transaction tax software. To be certified, the software would need to be comprehensive and able to perform the following tasks: determine the appropriate tax rate for every transaction and calculate the VAT due; post the amount of VAT due on the invoice; link each input or output to the correct VAT return; and correctly complete the VAT return. In addition, the system would authorise the remission of taxes due. Even though many systems which do this already exist, they have not been certified as "accurate". Moreover, the software will have to be able to validate whether the system used by the contract partner is also certified. In the US, the use of certified software is not mandatory for companies, except in cases when a company is strongly engaged in transactions susceptible to missing trader fraud, such as supplies of computer chips or mobile phones and transfers of tradable CO2 emission permits. In such instances, a jurisdiction may make the use of certified software mandatory. The destination principle of the existing EU VAT system is not affected by D-VAT certification. Provided that the customer also uses certified software, D-VAT will, in principle, permit companies to zero-rate intra-Community supplies of goods, with the result that the software of the customer will ensure that the accompanying intra-Community acquisition of goods shall be subject to VAT in the member state of destination. The existing VAT legislation in the EU does not, however, provide any direct links between the application of the zero-rate to intra-Community supplies and taxation of the accompanying acquisitions in the member state of destination. The supplier must be able to provide evidence confirming that the goods have actually left the member state of their departure in order for the intra-Community supply to be zero-rated. In that regard, it is irrelevant that the customer has accounted for VAT on the acquisition in the member state of destination of the goods. Furthermore, D-VAT certification is not able to protect legitimate companies from becoming involved in missing trader fraud. Even though a customer uses certified software, the fraudulent supplier can still go missing with the VAT. The latter is not possible if the supplier also uses certified software, together with a certified service provider who guarantees remittance of the supplier's VAT liability. It is, however, not likely for fraudulent traders to use CSPs' services. The more information the revenue authorities obtain about the prices of specific goods at preceding and subsequent stages of the distribution process, the easier it will be for them to detect price dips and prove that an legitimate trader should have been aware of his involvement in an unlawful transaction. Despite the fact that such a trader might be using certified software or a CSP, his input VAT deduction right will consequently be lost. Clearly, missing-trader fraud cannot be prevented by the use of certified tax software and it would be unrealistic to expect 35 million EU companies to use CSPs. As a solution to missing trader fraud, mandatory use of CSPs in sectors susceptible to fraud would be ineffective because the fraud can easily shift to a different sector (Ainsworth, 2011a, pp. 11-14).

5.10.4 Final remarks

VAT has always been susceptible to missing trader fraud, mostly because it is imposed at high rates and has a broad base. Fraud in the EU started off as smuggling of gold across the borders of Luxembourg. This gold was then sold (inclusive of VAT) in other member states before its traders would go missing. As from 1 January 2000, the reverse charge mechanism may be applied to such supplies. However, the extent to which missing trader fraud has developed (for example, digitised CO2 permits or VoIP services), dramatically surpasses gold smuggling. Technological development enables the fraudsters to move fast, making the expansion of fraud almost limitless. Enforcement efforts need to be just as quick. Even though VLN is unable to cover the entire EU economy, from the above considered options, it may provide a solution to missing trader fraud in certain sectors. D-VAT certification cannot prevent missing trader fraud, although it does positively affect VAT compliance. Furthermore, using CSPs is quite costly, particularly for the SMEs. RTvat is therefore the only solution to effectively prevent missing trader fraud and limit other types of fraud (e.g. suppression fraud). It prevents the collection risk for the revenue authorities while retaining all the safety mechanisms of a true VAT system. Under the RTvat system, transactions are paid for through banks, which is a payment method that has already become quite common in B2B and B2C transactions. However, the time at which VAT liabilities arise and input tax can be deducted does require a change. Such a shift should positively affect the economy in general. Traditional audits will continue to be necessary in the future to combat sophisticated VAT avoidance schemes. However, the more robust the basic VAT system is, the more time inspectors and auditors can devote to closing other leaks in the VAT system (Ainsworth, 2011b, p. 160).

CONCLUSION

During the past 40 years, the existing invoice-based system in the EU has shown to be efficient at collecting substantial amounts of tax revenue for the member states. Following its success in Europe, fractionated payment VAT system has been adopted by more than 130 countries worldwide as the most efficient basis for consumption tax. However, the expansion of VAT fraud in the EU has begun to impact current account balances and international trade statistics of member states and therefore calls for coordinated and determined action. Despite the benefits it provides, the existing system does require amendments in order to reverse the current trend (International VAT Association, 2007, p. 43). It has recently been revealed that at least EUR 100 billion is annually being lost to tax authorities in the EU because of a tax system which is not functioning as it should.

From the analysis of possible solutions to tackle VAT fraud, especially VAT carousel fraud, it becomes obvious that the issue cannot be solved by a single solution. Some realistic and pragmatic actions should be taken in the short run. VAT's fundamental principles should remain unaltered when attempting to change the system in order to effectively combat VAT fraud. The "rules of the game" that are equitable for legitimate companies should be preserved and a continuous improvement in the efficiency of the tax authorities should be ensured, including a reward system, together with technological solutions. Actions taken only at the member state level would cause conflict interpretations, legal uncertainty and higher costs for companies and must therefore be coordinated at the EU level.

The huge VAT revenue losses across the EU are well recognised, with the latest figures from the Commission showing that only 55% of potential VAT revenue is being realised. By introducing real-time collection across all member states, this figure could be significantly improved and the resulting additional revenue for tax authorities and budgets would significantly ease many economies' current austerity issues (Williams, 2011). Considering the technological solutions to the problem, RTvat is the only solution which is actually able to prevent missing trader fraud and limit some other types of fraud. Despite its technical specifications requiring further improvements, RTvat is clearly the most practical and promising solution in order to achieve a robust VAT system. There are currently no alternative solutions capable of preventing all possible forms of fraud, closing the VAT gap and preventing VAT evasion. It will be necessary to continue with the practice of traditional auditing in the future in order to tackle complex VAT avoidance schemes (Ainsworth, 2011b, p. 160).

As long as tax evasion and tax avoidance in the human mind is viewed as something "cool", and as long as tax rates remain extremely high, or even increase, there will always be a significant tax gap. Fraudsters will always find loopholes in the new legislation or technology and the key is to stay one step ahead, not one step behind.

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APPENDIXES

TABLE OF APPENDIXES

Appendix A: Fiscal substitution as a means of combating VAT fraud[35]

The **VAT per se** is calculated based on the value of the operation between the person liable to pay the VAT and its client. **Substitution VAT** is calculated based on an "indicative value". The VAT thereby obtained is deducted from the operator's VAT per se. The client will pay this difference to the supplier who will, in turn, pay the tax to the state. In intra-Community sales, the VAT will be paid directly to the destination state by the supplier liable for VAT payment. This means that in such transactions, the client will be asked for the price of the transaction and the value of the substitution VAT. This client in turn will not be VAT taxable during its sales transaction and neither will any of the following operators in the chain.
Below is given an example involving a manufacturer of mobile phones and the subsequent production stages of the distribution chain (International VAT Association, 2007, p. 28).

For instance, a wholesaler purchases a mobile phone from the manufacturer for EUR 100 before VAT. This transaction is charged with a 20% VAT rate and the "indicative value" of the sale to the final consumer is EUR 150 before tax.

- EUR 20 = the **VAT per se** of the operation (EUR 100 x 20%)
- EUR 15 = the deductible VAT (raw materials)
- EUR 5 = the net **VAT per se paid to the tax authority** (EUR 20 – EUR 15)
- EUR 10 = the VAT for fiscal substitution ((EUR 150 x 20%) – EUR 20)[36]

The invoice will state the following:	EUR 100 = the total value of the operation
	EUR 20 = the VAT per se
	EUR 10 = the value by fiscal substitution
	--
	EUR 130 = the total to be paid by the wholesaler

The plant is therefore paid EUR 130 by the wholesaler and pays EUR 15 (5 + 10) to the tax authorities being the total VAT on the mobile phone (plant to final consumer).

The wholesaler pays EUR 130 for the mobile phone before selling it for EUR 140 to the retailer. This operation is not subject to output VAT and neither is any input VAT permitted.

The retailer pays EUR 140 for the mobile phone before selling it to the final consumer for EUR 180 (tax included). This operation is not subject to output VAT and neither is any input VAT permitted.

No VAT is therefore charged in transactions taking place after the plant (point of substitution), regardless of the price of the sale to the final consumer being lower or higher than EUR 150 (indicative value). The tax authorities are, in fact, capable of accepting the

[35] It is ummarised from International VAT Association (2007, pp. 48 & 49) report.
[36] ((Taxable base x rate) – deductible VAT).

taxation on a value different than that of the actual operation due to the security of getting the VAT receipts in and also the effective advance payment of the funds.

Appendix B: Abbreviations and Glossary

ARS	Alternative Remittance System
AT	Austria
B2B	Business to Business
B2C	Business to Customer
BE	Belgium
BEF	Belgian franc
BU	Bulgaria
Burden of proof	Legal obligation of a party to prove the allegation made by him against another party
Carousel fraud	The most abusive variant of a MTIC fraud because it can occur be repeated several times with the same goods
Cascade tax	Tax where no credit is given to readers for tax paid on the purchase of their inputs
CH	Switzerland
CO2	Carbon dioxide
Commission	European Commission
Council	Council of the European Union
CPUs	Computer Processing Units
CY	Cyprus
CZ	Czech Republic
D-VAT	Certified tax software (Digital VAT)
DE	Germany
DK	Denmark
EC	European Community
ECJ	European Court of Justice
EC-Treaty	Treaty Establishing the European Community
EE	Estonia
EEC	European Economic Community
e.g.	for example
ES	Spain
etc.	Et cetera; and so on
EFT	Electronic Funds Transfer
EU	European Union
EUA	EU Emission Allowance
EUROFISC	European Union network in which all member states participate that enables targeted and swift action to be taken to combat new and specific types of fraud. It involves a multilateral early warning mechanism, and the coordination of both data exchange

	and the work of liaison officials in acting upon warnings received.
FATF	Financial Action Task Force
FI	Finland
First VAT Directive	First Council Directive 67/227/EEC
FR	France
FTI	Federation of Technological Industries
GBP	Great British Pound
GR	Greece
GST	Goods and services tax
HU	Hungary
IE	Ireland
IMF	International Monetary Fund
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
Member states	EU member states
Missing trader	The Council's definition: "Missing trader shall mean a trader registered as a trader registered as a taxable person for VAT purposes who, potentially with a fraudulent intent, acquires or purports to acquire goods or services without payment of VAT and supplies these goods or services with VAT, but does not remit VAT due to the appropriate national authority"; defaulting trader
MS	member state
MT	Malta
MTIC	Missing Trader Intra-Community
MTEC	Missing Trader Extra-Community
NL	Netherlands
NO	Norway
OECD	Organisation for Economic Cooperation and Development
OLAF	Office européen de lutte anti-fraude; European Anti-Fraud Office
One-stop-shop	System where taxable persons taking part in transactions subject to VAT in different member states can meet all their VAT obligations for those transactions in a single member state
p.	page
Piecemeal	bit by bit; piece by piece; slowly
per se	In itself
PL	Poland
PT	Portugal
RO	Romania

RTvat	Real-Time VAT
SAF-T	Standard Audit File – Tax
SE	Sweden
Sixth VAT Directive	Council Directive 77/388/EEC
SI	Slovenia
SK	Slovakia
SME	Small and Medium Enterprise
SSUTA	Streamlined Sales and Use Tax Agreement
TASS	Tax Authority Settlement System
UK	United Kingdom
vs.	versus
VAT Directive	Council Directive 2006/112/EC
VAT	Value Added Tax
VIES	VAT Information Exchange System
VLN	VAT Locator Number
VoIP	Voice over the Internet Protocol