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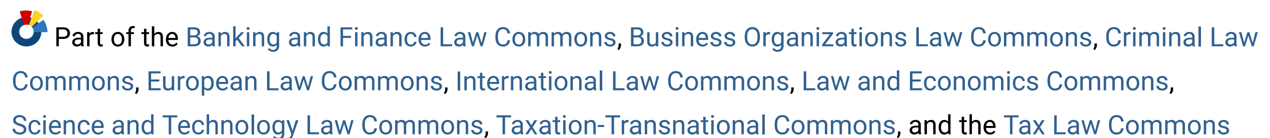
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THE MORPHING OF MTIC FRAUD: VAT FRAUD INFECTS TRADABLE CO_2 PERMITS

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Richard Thompson Ainsworth

Missing trader intra-community (MTIC) fraud has been slowly morphing from cell phones and computer chips to other commodities.[1] In the last few months however MTIC made a dramatic appearance in tradable CO2 permits. It closed exchanges and prompted France[2] and the Netherlands[3] to unilaterally change their tax treatment of CO2 trades.[4] The UK has followed the French treatment in large measure. Announced on July 30, 2009 the UK change went into effect the next day. The UK has applied for a "retrospective derogation" to ratify its position.[5]

On Monday June 8, 2009 rumors of MTIC fraud in carbon emission permits closed the main European exchange for spot trading of European Union carbon emissions permits and Kyoto offsets. When BlueNext[6] began trading permits again on Wednesday, June 10, 2009, the certificates, which had previously been subject to the 19.6% French VAT, were exempt (without right of deduction). For French purposes CO2 permits were now a security.

A timeline of the critical events shows how quickly the indicia of fraud unfolded, and how fast the French Budget Ministry reacted. For a backdrop, consider that average trading volumes of CO2 permits on BlueNext for the first four months of 2009 was less than 7 million credits per day. There was a mild warning of possible problems when average trading volume jumped to 9.4 million credits in May. But the big bang occurred on Tuesday, June 2, 2009 when a record 19.8 million credits were traded on that single day. The following day trades fell to 2.5 million.

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[1] Fabrizio Borselli, *Pragmatic Policies to Tackle VAT Fraud in the European Union* INT. VAT MONITOR 333 & n. 6 (Sept./Oct. 2008) (indicating that MTIC can involve "any type of goods" but has favored mobile phones and computer chips and is now reasonable common in sales of meat, cars, mineral oils, soft drinks, cosmetics, and precious metals, but not considering MTIC in the sale of services where it has just surfaced with recent developments in CO2 permits).

[2] 58 BULLETIN OFFICIEL DES IMPÔTS [OFFICIAL GAZETTE OF TAXES] (June 11, 2009), *Taxe sur la Valeur Ajoutee. Regime Applicable aux Quotas D'emission de Gaz a Effet de Serre* [Value Added Tax. Conditions of Quotas for Emission of Greenhouse Gases] *available at*: http://www11.minefi.gouv.fr/boi/boi2009/liste.htm (in French); Michael Szabo & Muriel Boselli, *Update 2 – France Makes CO2 Credits VAT-exempt to Avoid Scam*, REUTERS (Jun. 8, 2009) *available at*: http://www.reuters.com/article/marketsNews/idUSL863750820090608?sp=true;

[3] SECTOR BRIEVEN & BELEIDSBESLUITEN [SECTOR LETTERS & POLICY DECISIONS], Decree of July 14, 2009 No. DGB2009/3897M, *available at*: http://www.minfin.nl/dsresource?objectid=72139&type=org (in Dutch).

[4] Nina Chestney, *Netherlands Acts on Tax Fraud in Carbon Market*, REUTERS (Jul. 15, 2009) *available at*: http://www.reuters.com/article/GCA-GreenBusiness/idUSTRE56E5WD20090715; Remco Smorenburg, *Netherlands Expands VAT Reverse Charge Mechanism to Transfer of Carbon Dioxide Rights*, (Jul. 14, 2009) TAX ANALYSTS Doc 2009-15989 or 2009 WTD 1344.

[5] HMRC, REVENUE & CUSTOMS BRIEF 46/09, *VAT: Zero rating of emission allowances with effect from 31 July 2009, available at:* http://www.hmrc.gov.uk/briefs/vat/brief4609.htm

> Although there is currently no specific provision in EU law to introduce this measure, the UK Government believes that it is in the public interest that steps be taken now to prevent substantial potential losses to the Exchequer and to ensure that the legitimate market is not undermined by fraudulent trading. Although a number of other options were considered, zero rating was the only option that could be introduced quickly enough in the UK and without any significant impact on legitimate trade in the markets concerned.

[6] BlueNext is a joint venture between the NYSE Euronext and Caisse des Depots.

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On June 4th and 5th, the French national emissions registry was closed for "technical reasons." No trades occurred over the weekend. On June 8th and 9th the BlueNext blocked all spot trading of CO2 credits. It was only on the morning of June 10th that trading resumed.

MTIC fraud in tradable CO2 permits presents a high level policy dilemma[7] – how do you aggressively pursue tax fraud without destroying the tradable permits market? Traditional tax enforcement (aside from direct pursuit of the missing trader) centers on denying deductions for VAT paid to the trader who purchased from the missing trader. This trader could well be innocent, and that is the problem. The standard of proof for allowing this deduction is whether or not this party knew or had reasonable grounds to suspect that the VAT payable in respect of the supply (or any previous or subsequent supply) would go unpaid.[8] The underlying difficulty for the CO2 market is – even if there is no fraud – just the *possibility* of being denied millions of euro in VAT deductions is a significant increase in risk. When risks rise, prices follow. Markets fail when risks get unmanageable. This may be what we saw on Wednesday June 3rd when traders apparently stayed away from BlueNext. Risk was becoming unmanageable.

MTIC FRAUD

What is MTIC fraud? There are several permutations of this scheme, but the essential elements are that a taxable person ("missing trader") acquires goods from another Member State free of VAT, has an obligation to self-assess and remit VAT and does not. MTIC fraud takes advantage of a temporary relinquishment of normal VAT obligations, a disruption that has been deliberately put in place to implement the destination principle in cross-border intra-community sales.

In a cross-border intra-community sale a zero rate is applied to the transaction by the seller's jurisdiction, but the purchaser's jurisdiction requires a reverse charge (by the buyer) to re-establish the VAT (at the destination jurisdiction's rate). "Missing traders" exploit this situation by reporting the purchase (upon which no net VAT is due), quickly making a re-sale of the goods with VAT, collecting the amounts due, and then vanishing without remitting the VAT that has been received.

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[7] HMRC sets out this policy dilemma:

> The ability to trade freely in emissions allowances is an important feature of the EU Emissions Trading Scheme. However, the existence of a strong secondary cross-border market in emissions allowances generates very high volume, value and speed of trade. This, combined with the fact that EUAs are only surrendered once a year provides fraudsters with multiple opportunities to steal VAT following cross-border acquisitions.

HMRC, REVENUE & CUSTOMS BRIEF 46/09, *supra* note 5, at **Background**

[8] *Commissioners of Custom & Excise v. Federation of Technological Industries* C-384/04 (May 11, 2006); [2006] ECR I-4191. Applying this rule requires the jurisdiction involved to enact joint and several liability in accordance with VAT DIRECTIVE Art. 205. The SIXTH COUNCIL DIRECTIVE of 17 May 1977on the harmonization of the laws of the Member States relating to turnover tax – Common system of value added tax: uniform basis of assessment (77/388/EEC) 1977 O.J. (L 145) 1 was repealed and replaced on November 28, 2006 with the RECAST VAT DIRECTIVE. Council Directive 2006/112/EC on the Common system of value added tax, O.J. (L 347) 1. Citation throughout this document will be referenced (VAT DIRECTIVE).

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This describes a simple "acquisition fraud" fact pattern. The "missing trader" will act very fast, and dispose of the goods at a discount. The fraudster's full margin is the embezzled VAT. Thus, in France a fraudster's margin is 19.6%.

A more complex version of MTIC fraud is "carousel fraud." The name derives from the movement of the goods involved. The same goods are repeatedly sold across EU borders – essentially in a circle – as if on a carousel.[9] Participants in the fraud are continually importing, reselling and then re-exporting the same goods among themselves. The amount of money that this version of MTIC can generate is essentially unlimited.[10] Regardless of the version employed, MTIC fraud is a deliberate, systematic, and criminal attack on the integrity of the tax system.

MTIC fraud has become increasingly more complex as tax authorities chase fraudsters for unreported VAT. Sophisticated techniques are used to hide the fraud trail, and include using offsets (in goods or in services) in a contra-trading pattern.[11] Third countries (Dubai, Hong Kong, Switzerland, the US and the Arab Emirates) are sometimes brought into the fraud as the Community customs transit rules[12] are exploited to move goods around the EU tax-free until a location is found where the fraud can be effectuated. After the fraud, the goods are quickly re-exported leaving both VAT and customs duties unpaid.

MTIC IN CO_2 PERMITS

MTIC in CO_2 permits does not fit the normal pattern. Most MTIC fraud has involved high value, easy to transport *goods*. MTIC in CO_2 permits is a fraud that uses *securities* (options) classified as *services*.

However, MTIC fraud is not dependent on the kind of transaction (good or service or security classified as a service). MTIC is a structural attack on the VAT that depends on an *insecure break* in fractionated payments.[13] To prevent MTIC one needs to either (a) remove the

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[9] See for example, Joined Cases C-354/03 (*Optigen*), C-355/03 (*Fulcrum*), and C-484/03 (*Bond House Systems*)

[10] FINANCIAL ACTION TASK FORCE, LAUNDERING THE PROCEEDS OF VAT CAROUSEL FRAUD 2, 18 & 22 (Feb. 23, 2007) *available at*: http://www.fatf-gafi.org/dataoecd/16/3/38335020.pdf

[11] See for example, *Olympia Technologies, Ltd. v. HMRC*, London VAT Tribunal 20570 (Feb. 15, 2008) *available at*: http://www.financeandtaxtribunals.gov.uk/judgmentfiles/j3753/20570.doc.

[12] EUROPEAN COMMISSION, NEW CUSTOMS TRANSIT SYSTEMS FOR EUROPE, *available at*: http://ec.europa.eu/taxation_customs/resources/documents/annex_I_transit_brochure_en.pdf

[13] Fractioned (sometimes called "fractionated") payments is a bedrock principle of the VAT. It is the concept that at each stage of production the tax on the value added at that stage of production is collected from the next person in the chain by the seller. A reverse charge collects this same amount, for the same value added, from the same party, but does so through a self-assessment (rather than through a charge by the seller on the invoice) – hence the expression is reverse charge. There has been a considerable amount of discussion about this mechanism with advocates indicating that it is the single most significant procedure for reducing business compliance costs in the single market [*see*: Patrick Wille, *Towards a Workable VAT System,* INTERNATIONAL VAT MONITOR 232 (Sept./Oct. 2001)] and with opponents suggesting that it the single largest threat to the integrity of the system [*see*: Ben J.M. Terra & Julie Kajus, *Directive 2000/65/EC on the Determination of the Person Liable for Payment of VAT; Representation Rules Simplified,* INTERNATIONAL VAT MONITOR 270 (Nov./ Dec. 2000); and the EU Commission itself at COM(94) 471 final of Nov. 1994].

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break [overhaul the current system[14]], or (b) make the break *secure*. This paper takes the second approach, it proposes a technological way to make the break secure.

Fraudsters look to for MTIC "opportunities" where a taxable party performs a reverse charge followed by a normal charge. MTIC happens when a party (who can go "missing") has both the obligation to self-assess the VAT on its purchases and the right to collect VAT on onward sales. When fraudsters are "fine tuning the opportunity" they look for situations where the "buy" and "sell" can happen quickly (typically a situation where the object is a fungible commodity), where margins are narrow (so that buyers are ready to jump when there is a small break in prices), and where there are efficient (formal or informal) markets (so that the deal is quickly sealed and the fraudster can vanish without traces).

Her Majesty's Revenue and Customs Manual laid out this ideal environment when it discussed the tax treatment of tradable CO2 permits in *VATPOSS09800 – Services supplied where the recipient belongs (schedule 5); cross-border trading of greenhouse gas emission allowances*. Maybe fraudsters have been reading the UK Customs Manual? Or maybe fraudsters stumbled across this ideal MTIC environment all on their own? Nevertheless, what we see in the UK is not unique to the UK. The Customs Manual itself indicates:

> HMRC's policy in determining the place of supply of emissions allowances when traded across borders follows extensive discussions in Europe on the EC Emissions Trading Scheme (EC ETS). All Member States agreed to apply the same rules for determining the place of supply of those allowances for VAT purposes. It aligns the UK's place of supply treatment with other Member States to ensure consistency and to remove the possibility of double or non taxation.[15]

The Customs Manual's concern with "…the possibility of double or non taxation" echoes an OECD effort to harmonize tax treatment of tradable permits globally.[16] But one wonders how "all" the EU Member States could have had "extensive discussions" on the VAT treatment of CO2 permits and miss the fact that they were opening up a brand new field for MTIC fraud?

In a concise statement of the VAT treatment of tradable permits (prior to July 31, 2009) HMRC makes it clear that when a UK taxable person makes an intra-community purchase of a

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[14] Richard T. Ainsworth *Tackling VAT Fraud: 13 Ways Forward,* 45 TAX NOTES INT'L 1205 (Mar. 26, 2007) (outlining the twelve major proposals for resolving MTIC fraud through substantial re-design of the EU VAT, and proposing a technological solution based in a fully digital VAT).

[15] HMRC, *VATPOSS09800 – Services supplied where the recipient belongs (schedule 5); cross-border trading of greenhouse gas emission allowances,* at Introduction, *available at*: http://www.hmrc.gov.uk/manuals/vatpossmanual/VATPOSS09800.htm.

[16] OECD, CENTER FOR TAX POLICY AND ADMINISTRATION, COMMITTEE ON FISCAL AFFAIRS, TAXATION AND TRADABLE PERMITS (Note by the Secretariat), CTPA/CFA(2009)31REV1 (July 1, 2009). There is a lot of work to be done in this area if trade in permits is expected to be global. Not the least of which is the characterization of the permit as a good or a service. The EU considers tradable certificates services, but India considers them goods (*see*: Sanjay K. Agrawal, *Accounting and Taxation Aspects of Carbon Trading,* THE CHARTERED ACCOUNTANT 509 (October 2006) *available at*: http://icai.org/resource_file/9922509-513.pdf) and the State of North Dakota considers them neither goods not services. In North Dakota they are securities (just as they are under the current French rules). They are not farm income, but they are subject to capital gain treatment, and are not subject to the retail sales tax (*see*: NORTH DAKOTA OFFICE OF THE STATE TAX COMMISSIONER, PROPERTY TAX NEWSLETTER 6 (Feb. 1, 2008) *available at*: http://www.nd.gov/tax/property/pubs/newsletter/newsltr-feb08.pdf.

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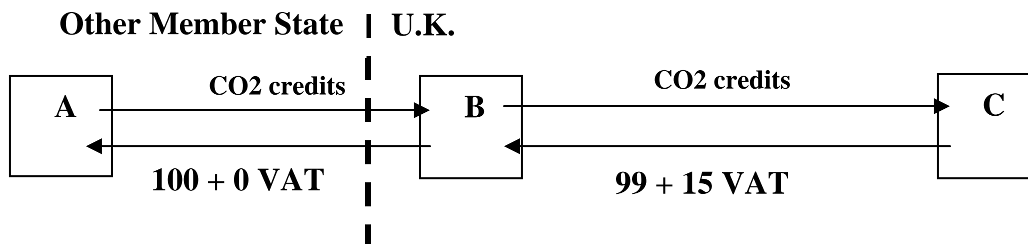
carbon permit and resells it within the UK that that person will both reverse charge on the purchase and collect VAT on the onward sale. If he chooses to not remit the tax to the Treasury, and simply "go missing" – we have a classic case of MTIC in tradable permits. HMRC indicates:

> Cross-border trading in emissions allowances are treated as supplied where received under Schedule 5 of the VAT Act 1994 (**Article 56** of the Principal VAT Directive). Transactions that take place between parties established in the UK will continue to be taxed where the supplier belongs, under the basic rule in section 7(10) of the Act (**Article 43** of the Principal VAT Directive).[17]

Article 56 sets out the place of supply rule for miscellaneous services in cases where the customer is a business that is located either outside the EU of within the EU but in a different Member State. The place of supply is where the customer is established, and article 196 requires all businesses purchasing services subject to article 56 to pay VAT by reverse charge. Under article 43 the place of supply of services is the place where the supplier is established. Normal rules apply under article 43 for the collection of VAT. Thus, VAT is placed on the invoice and is collected by the UK supplier.

Prior to July 31, 2009 the opportunity for MTIC fraud in the UK CO2 market could be set out as follows:



In this example we assume that A (established in another Member State) sells CO2 credits to B (established in the UK), and that B re-sells the CO2 credits to C (also established in the UK). If there is no VAT collected by A on the sale to B [articles 56 & 196], and if B intends to "go missing," then B would quickly re-sell the CO2 permits to C. To assure a quick sale B would reduce the price of the CO2 permits (from 100 to 99). If a return is not filed on the onward sale, and the VAT collected is not remitted, then the net from the fraud would be approximately 15% of the value of the trade (the current VAT rate in the UK).

CO2 TRADABLE PERMITS MARKETPLACE

[17] HMRC, *VATPOSS09800, supra* note 15, at "EC law" (emphasis added). The HMRC reference to the "Principle VAT Directive" is to the controlling European directive on VAT. It was formerly known as the SIXTH COUNCIL DIRETIVE of 17 May 1977on the harmonization of the laws of the Member States relating to turnover tax – Common system of value added tax: uniform basis of assessment (77/388/EEC) 1977 O.J. (L 145) 1. On November 28, 2006 the SIXTH COUNCIL DIRECTIVE was repealed and replaced with the RECAST VAT DIRECTIVE (RVD). Council Directive 2006/112/EC on the Common system of value added tax, O.J. (L 347) 1. This paper simplifies references to the current Directive by referring to "Articles." The Articles involved are articles 56, 43, and 196.

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On October 13, 2003 the European Parliament and the Council set out the rules for the trading of greenhouse gas emission allowances.[18] The Directive follows from the UN Framework Convention on Climate Change[19] and the Kyoto Protocol.[20] The intent is to reduce greenhouse gas emissions by 8% relative to 1990 levels.

The trading system began on January 1, 2005. Under the system industrial operations (such as combustible installations, coke ovens, oil refineries, glassworks, brickworks, ceramic product manufacturing installations and paper mills) are not allowed to operate unless the installation operator possesses permits issued by the competent authority. Permits will be surrendered by the operator annually (in other words the permits are "consumed" annually). The operator will have to surrender a quantity of emission allowances equal to the facility's total emissions during the year.[21]

Each Member State has an allocation plan and distributes emission certificates to facilities within its jurisdiction.[22] Emission allowances are mutually recognizable among Member States, they are transferrable among persons (natural and legal), both inside and outside the EU. The intent is to use the marketplace to regulate greenhouse gas emissions through the tradability of the certificates.

For example, if a facility uses obsolete technology they will be allocated a relatively high number of emissions certificates in contrast with a facility that has more efficient production processes. Expansion of the efficient processes will create a shortage of emission allowances and these operators will endeavor to secure more permits by purchasing them from less efficient operators. The EU has appointed a Central Administrator who maintains an independent transaction log that monitors all sales activity in permits.[23]

The leading European exchange for the spot trading of emissions credits is BlueNext in Paris.[24] CO2 permits can be bought and sold on this exchange on a regular basis regardless of

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[18] DIRECTIVE 2003/87/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, *available at*: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2003L0087:20090625:EN:PDF (consolidated text).
[19] Approved by Council Decision 94/69/EC, 2003 O.J. (L 33).
[20] Approved by Council Decision 2002/358/EC, 2003 O.J. (L 130).
[21] One emission allowance conveys the right to emit one ton of carbon dioxide.
[22] National allocation plans are available at http://ec.europa.eu/environment/climat/emission/emission_plans.htm
[23] *Available at*: http://ec.europa.eu/environment/climat/emission/citl_en.htm
[24] Globally, there are 19 exchanges. They can be broken down into five geographic groups:
Europe (1) European Climate Exchange; (2) OMX Nordic Exchange; (3) EEX – European Energy Exchange (Eurex); (4) EXAA – Energy Exchange Austria; (5) Bluenext – (formerly Powernext) (NYSE Euronext and Caisse des Depots); (6) Climex (Amsterdam); (7) Climate Spot Exchange (London);
North America (8) CCX – Chicago Climate Exchange; (9) The Green Exchange (NYMEX); (10) CCE – Canadian Climate Exchange (Winnipeg Commodities Exchange); (11) MCeX – Montreal Climate Exchange; (12) Toronto Stock Exchange
South America (13) Brazil Mercantile Futures Exchange
Asia (14) MCX – Multi Commodity Exchange of India; (15) HKEx – Honk Kong Stock Exchange; (16) ACX – Asia Carbon Exchange (Singapore); (17) Beijing and UNDP Exchange; (18) Tokyo Stock Exchange Group and the Tokyo Commodity Exchange
Australia (19) Australian Climate Exchange

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the place of establishment of the buyer or seller. BlueNext exemplifies a highly efficient securities market, and was itself central to the speed with which MTIC allegedly swept through the CO2 market.[25]

A CAUTIONARY NOTE

A cautionary note amid all this discussion of MTIC fraud in the CO2 markets is necessary. Although the BlueNext exchange closed for two days, and rules to deal with MTIC were put in place in France, the Netherlands, and now in the UK, there has been no public proof of MTIC fraud – just rumors and quick official actions. Where there is smoke there is frequently fire, but in this case we are just binning to see the flames.

On August 19th HMRC reported the arrest of seven individuals for their alleged involvement in a £38 million ($63 million) CO2-MTIC fraud.[26] Prior to this announcement the reports out of the U.K. were equivocal. The following is a typical earlier report:

> HM Revenue and Customs (HMRC) has recently uncovered what is thought to be the first attempted UK tax fraud in the carbon emissions trading market. ... An HMRC spokesman declined to reveal the size of the recently attempted VAT fraud in carbon trading – a multi-billion pound global market and a key mechanism for reducing greenhouse gases. He said that HMRC was monitoring the situation and discussing the potential fraud threat with other EU tax authorities and business.[27]

Evidence of CO2-MTIC fraud in Dutch reports is far less convincing that actual fraud has been uncovered. The July 2009 reports from the Netherlands record government officials saying that "[t]here are 'clear indications' of fraudulent activity in the Dutch carbon emissions market, … "Specifically carousel fraud, where the booked turnover tax is not paid but nevertheless deducted from tax in the tax return, the Ministry said on its website."[28] The "indications" the Ministry seems to point to are abnormal surges in trading activity similar to that reported on the French exchange, "… Trades on the Dutch Climex exchange grew by 49% in June [2009], despite an overall drop in trading volumes across all European emissions exchanges, recent data showed."[29]

But in interviews the management of the Dutch exchange will only confirm that government actions were taken. The actions were appreciated and they were simply cautionary.

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[25] It is interesting to notice the difference between MTIC in goods and MTIC in CO2 permits. MTIC in CO2 permits must seem to the fraudsters to be a far easier fraud to perpetrate. In traditional MTIC fraud where *goods* are sold across community borders to missing traders it is critical that the goods involved physically move out of one Member State and into another Member State. Without this movement, the transaction will not attract a zero rate of VAT. Even though the transaction is between parties established in different Member States, the sale remains domestic, and domestic VAT applies. *Teleos, Plc and Others v. HMRC*, C-409/04. The reverse charge in *services* transactions however, is not dependent of movement of goods, or any other kind of physical delivery.

[26] HMRC, Press Release, *Seven Arrests in Carbon Credit Investigation* (Aug. 19, 2009) *available at*: http://nds.coi.gov.uk/clientmicrosite/Content/Detail.aspx?ClientId=257&NewsAreaId=2&ReleaseID=405990&SubjectId=36**.**

[27] Nick Huber, *Fraudsters Target Tax on Carbon Credits,* Telegraph.UK.CO (July 19, 2009) *available at*: http://www.telegraph.co.uk/finance/5866178/Fraudsters-target-tax-on-carbon-credits.html.

[28] Chestney, *Netherlands Acts,* at *supra* note 4.

[29] *Id.*

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However, nothing explains precisely[30] why the steps were necessary, why they were needed so quickly, why approval of the EU Commission was not requested or received, or how serious the problem was, or still is. Typical reports indicate:

> "We don't see carousel trading happening on our platform," Alex Posthumus, Climax chief executive, told Reuters. "But we are very happy with the decision [to apply the reverse charge to all onward sales of emissions rights in the Netherlands] because now everyone can be sure that when he trades on Climex there won't be any problems." … "We already implemented our own measures to ensure the spot exchange was not subject to VAT fraud, but it is very helpful that the Dutch government substantially supports the market with this decision. We hope that other countries will follow suit, or that action will be taken at the EU level," Posthumus added.[31]

The same pairing of dire comments from government officials and moderate comments from members of the BlueNext exchange occurred in France. From the government side we saw:

> The French Budget Ministry has made carbon permits exempt from value-added tax (VAT) in order to prevent a potential tax scam linked to a French emissions exchange, a government source said on Monday. "There is a risk of VAT carousel fraud so as a preventive measure, we are changing the VAT regime on (emissions exchange) BlueNext's transactions," a Budget Ministry source told Reuters. "There has been no evidence of VAT fraud. It is only a rumor … but it could potentially hurt BlueNext's ability to compete, so we had to react."[32]

However, emissions traders and the spokesman for BlueNext seemed to downplay the problem. Their message is distinctly less dramatic:

> "Part of this volume was sound, coming from the market expanding and new players entering, but a share of it might be hard to explain, said one emissions analyst. A BlueNext spokesman also told Reuters there was no evidence that VAT fraud was occurring over its exchange, and that the rumors were "unsubstantiated."[33]

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[30] For example the Dutch decree implementing the reverse charge only states:

> With respect to emissions trading, there are strong indications of fraud involving the VAT charged on emissions trading. The fraud is called carousel fraud. …This phenomenon also occurs in other EU countries where emissions are traded. … If VAT is charged on an invoice that may involve (carousel) fraud then the right to deduct can be refused if on the basis of objective evidence it is found that the taxpayer knew or should have known that he participated in a transaction which involved VAT (carousel) fraud. …
>
> This leads to uncertainty among the recipients of allowances on their right to deduct the VAT charged….
>
> From a fiscal point of view, this uncertainty takes customers away from the market and fails to ensure that emissions trading is undisturbed. [Therefore] I decided that the turnover tax on the transfer of those rights can take place using the reverse charge procedure.

SECTOR BRIEVEN & BELEIDSBESLUITEN [SECTOR LETTERS & POLICY DECISIONS] *supra* note 3, at part 3.

[31] *Id.*

[32] Szabo & Boselli, *Update 2,* at *supra* note 2.

[33] *Id.*

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By the end of the same week the Paris prosecutor's office was rebutting this assessment when it confirmed that "… a probe was underway into a suspected multi-million euro value-added tax (VAT) fraud in the French carbon emissions market. 'An inquiry is underway but we are not yet about to place people under official investigation,' a source at the Paris prosecutor's office said … BlueNext spokesman told Reuters … that he was unaware of any investigation related specifically to the exchange. He said he had not been contacted by any authorities, including the Paris prosecutor's office, about the matter."[34]

Is it possible that the ''other half '' of the transactions being investigated by the Paris prosecutor's office is in the U.K. or the Netherlands? Is there one large multi-jurisdictional investigation going on, or has the whole tradable CO2 market been compromised? There are distinct similarities in the French, Dutch and U.K. reporting, and news reports of the UK investigation indicate that HMRC was assisted by Europol,

> Officers from Europol, the EU police agency, assisted in the arrest of six men and one woman, who were taken to police stations for questioning. An HMRC spokesman said that two further arrests were made later in the day and that more are expected.[35]

It is safe to say, that we appear to be at the very beginning of a very large fraud investigation. It is most likely multinational in scope, and the actors involved have been engage in it for some considerable amount of time. Citing from the HMRC's press release and public comment from officials another news report indicates:

> It is thought that the proceeds of this crime have then been used to finance lavish lifestyles and the purchase of prestige vehicles. Further arrests are likely and the investigation continues," the agency said, adding that it had searched 27 properties during the sweep and used dogs to search for cash.[36]

SOLUTIONS – FRENCH, UK, DUTCH & DIGITAL

Clearly, there is potential for large scale MTIC fraud in the tradable emissions marketplace. When the Member States agreed in common to deem transactions in these permits to be services, subject to a reverse charge on intra-community transfers and conventional treatment domestically MTIC was inevitable.[37] The question is – how much fraud is there in this market?

France, the United Kingdom and the Netherlands have taken self-help measures to prevent MTIC losses. None of these jurisdictions have received permission to make these changes, and objections have been raised in this regard.[38] Each country approaches the problem

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[34] Muriel Boselli & Michael Szabo, *Probe Under Way In Alleged French CO2 VAT Fraud,* PLANETARC (June 12, 2009) *available at*: http://www.planetark.com/enviro-news/item/53335.
[35] Business Times OnLine, *Seven Arrests in Carbon Trading Inquiry*, (Aug. 22, 2009) *available at*: http://www.carbonoffsetsdaily.com/uk-carbonmarketnews/seven-arrests-in-carbon-trading-inquiry-10930.htm
[36] James Kanter, Carbon Traders Arrested for Tax Fraud, NYT (Aug. 20, 2009) *available at*: http://greeninc.blogs.nytimes.com/2009/08/20/carbon-traders-arrested-for-tax-fraud/
[37] *See supra* note 13 - 15, and accompanying text.
[38] In a discussion that targeted the French change (but is equally applicable to the Dutch change) is the following:

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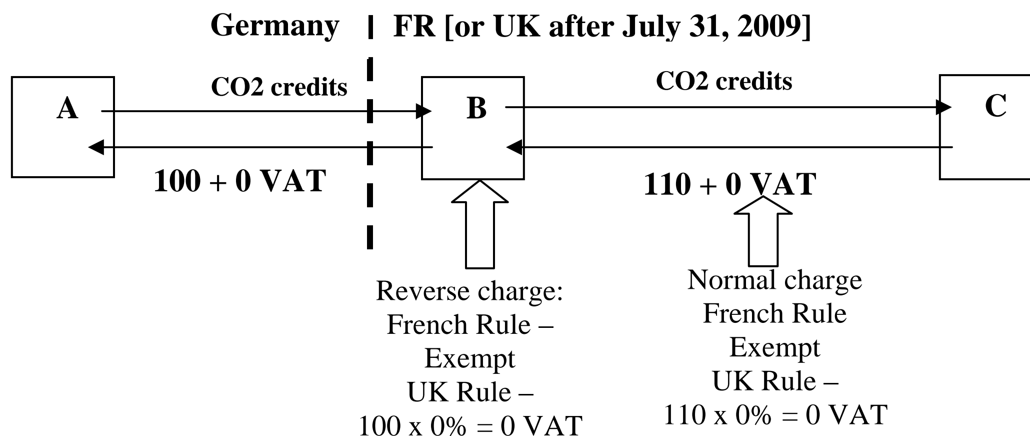
structurally. The French (and now the UK) have elected (unilaterally) to treat transactions in tradable emission permits as *exempt* (the French exemption is without right of deduction; the UK is with the right of deduction). The Dutch have taken a different (unilateral) route. Their solution takes a page from an earlier U.K. enforcement effort in the cell phone and computer chips markets – a full *reverse charge* regime.[39] There is another way, one that approaches the problem through administrative (not structural) mechanisms. It is technology-intensive, requires software certification. It is perfectly fit to foil MTIC fraud in a regulated and highly digital marketplace like that supporting tradable CO2 permits. But even more importantly, it is a scalable solution – a solution that can be applied broadly throughout the VAT

The French (as well as the companion U.K.) and Dutch solutions are considered next, followed by the proposed digital solution. The monetary amounts used in the following examples are hypothetical currency units.

French solution [similar to the U.K. solution after July 31, 2009]. The previous diagram used previously can help to explain the French and UK approach to preventing MTIC fraud in CO2 permits.



Assume that a German trader, A, sells CO2 emission credits to B, an enterprise established in France [or the U.K. after July 31, 2009]. In the French case the CO2 emission credits are securities. The transaction is exempt. No VAT is collected. In the UK case the CO2 emission credits are a service, the place of supply is the UK [after July 31, 2009]. UK rules apply to the transaction and a reverse charge is appropriate [article 196]. The UK solution imposes tax, but at a zero rate. This preserves he right of deduction. No VAT is collected.

> EU tax experts said France's move could be illegal. "They have really gone out on a limb here because you can't operate unilaterally as a member state on things like this," said Sandy Nicolson of KPMG's Carbon Advisory Group. "There is no obvious part of the European VAT directive that would give them the right to exempt these transactions." *Id*.

[39] COUNCIL DECISION 2007/250/EC, authorizing the United Kingdom to introduce a special measure derogating from Article 193 of Directive 2006/112/EC on the common system of value added tax, O.J. (L 109) 24, *available at*: http://eur-lex.europa.eu/LexUriServ/site/en/oj/2007/l_109/l_10920070426en00420043.pdf. The derogation expired on April 30, 2009, and was extended until April 2011. HMRC, *Revenue & Customs Brief 28/09 VAT -Reverse charge accounting for businesses trading in mobile telephones and computer chips: renewal of EU derogation*, available at: http://www.hmrc.gov.uk/briefs/vat/brief2809.htm

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Assume further that there is an onward supply by B to C. C is an enterprise in the same jurisdiction (France or the U.K. as the case may be). In France the onward supply is exempt. In the U.K. this onward supply is zero rated, and no VAT is collected.

There are good and bad sides to the French and UK solutions. Aside from counteracting the rumors that had threatened the stability of the BlueNext and the Climate Spot Exchange (a considerable if not the most significant benefit), the French [and UK] solution has a cash flow benefit to the exchange.

> Because these permits are traded between companies, there is no actual VAT collected. Globally it's revenue neutral," the government source said. A BlueNext spokesman said the exchange had been working with the ministry for several months to get a VAT exemption. "VAT placed quite a large financial burden upon us as we had to have the cash on hand to manage the cash flow," he said.[40]

The bad side of the French solution is that traders have lost their right to deduct input VAT. Sandy Nicholson of KPMG's Carbon Advisory Group indicated that

> … companies trading carbon in France, like investment banks and brokers, now cannot charge VAT when they sell credits and thus are not able to recover it on their overhead costs. "It's not a popular development. There are other, perhaps more effective ways to ameliorate the risk of fraud without harming this developing market," he said …[41]

This downside is avoided by the UK zero rate solution. Nevertheless, both the U.K. and French solutions require traders to re-program automated systems for tradable CO2 permits (but not for the other securities they may be involved with).

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[40] Szabo & Boselli, *Update 2,* at *supra* note 2.
[41] Boselli & Szabo, *Probe Under Way,* at *supra* note 34.

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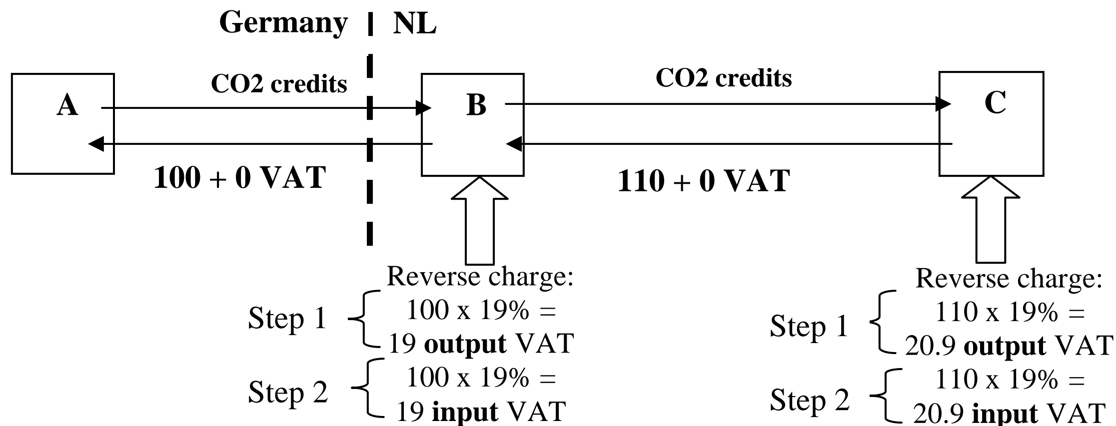
Dutch solution. The same diagram can be used to sketch the Dutch solution.



We begin by assuming that a German trader, A, sells CO2 emission credits to B (an enterprise established in the Netherlands) on the Climex exchange in Amsterdam. Because the CO2 emission credits are a service, the place of supply is the Netherlands [article 56]. Dutch rules apply and a reverse charge is required [article 196]. B is obligated to self-assess the VAT. In doing this B takes two steps. First it acts "in the place of A" and records Dutch output VAT of 19 on its return. Secondly, it acts in its own capacity and records Dutch input VAT of 19 on the same return for this same transaction. The net VAT on this return is zero.

Further assume that there is an onward supply by B to C (an enterprise also established in the Netherlands). It is made on the Climex exchange. Once again the carbon emissions credits are services, the place of supply is the Netherlands. Instead of following the normal rule and having B collect Dutch VAT on the invoice – a domestic reverse charge applies. C will not pay over the VAT to B. C is obligated to self-assess Dutch VAT.

The Dutch approach works. MTIC is avoided because no trader ever holds another trader's VAT. The difficulty is that instead of eliminating the break in the fractioned payment principle – this solution breaks all the fractionated payment links in the entire chain. This solution essentially turns the VAT into a retail sales tax (albeit one with a very long paper trail).[42]

It is extremely interesting to note that even though the UK has considerable experience with a full reverse charge in a MTIC fraud context, it chose to follow the French rather than the Dutch approach. HMRC specifically notes, "Although a number of other options were considered, zero rating was the only option that could be introduced quickly enough in the UK and without any significant impact on legitimate trade in the markets concerned."[43] Perhaps HMRC felt that if automated systems were already programmed to apply the VAT, then simply changing the rate to zero was simpler for traders than requiring the additional system programming that would be needed to implement a full reverse charge. But then again it could

[42] *See* at *supra* note 13.
[43] HMRC, REVENUE & CUSTOMS BRIEF 46/09, *supra* note 5.

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indicate that the UK is not completely satisfied with the effectiveness of the full reverse charge solution it adopted in cell phones and computer chips.

Digital solution. MTIC fraud is all about opportunistic fraudsters taking advantage of a temporary break in the chain of fractionated payments. A solution should therefore try to heal the break – not break the chain again (the Dutch solution) and not remove suspect supplies from the system altogether (the French and the U.K. solution). Neither the French/U.K. nor the Dutch solutions are scalable,[44] that is, they cannot be broadly applied to all permutations of MTIC fraud.

If Fabrizio Borselli[45] is right and MTIC can arise in "any type of good," (and maybe in many types of services) we need to find a scalable solution. Stripped to essentials, the problem is about *assurance*. Where is the *assurance* that when B makes an onward sale that he will not go missing with the receipts in his pocket? The important question is not *who* should remit the VAT; the important question is how can we be *assured* that whoever is charged with remitting VAT actually does so?

Certified tax software and a change in the place of supply rules for CO2 credits can solve this problem. Certified software is currently being used in the US retail sales tax by 23 states[46] under the Streamlined Sales and Use Tax Agreement (SSUTA).[47] The same software mechanisms could be applied in the EU to close the broken link in the fractionated payment system.

Only one statutory change is necessary – a conditional change in the place of supply. Under the current rules the place of supply for CO2 credits is where the customer is established [article 56]. If both buyer and seller are using certified systems this proposal would not change the place of supply rules, article 56 would still apply. However, if the buyer is not using a certified system the place of supply would be the seller's place of establishment [article 43]. How this change works can be seen in the four following examples.

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[44] In other words, if every time MTIC showed up in a type of supply we applied the Dutch solution we would eventually turn the VAT into a retail sales tax. If instead we selected the French solution we would severely compromise the tax base – no one would suggest solving MTIC in cell phone or computer chips by exempting them, or in the case of the UK simply zero rating them.

[45] *Supra* note 1.

[46] These twenty-three states are divided into two groups, the full members, and the associate members. A full member state is a state that is in compliance with the Streamlined Sales and Use Tax Agreement through its laws, rules, regulations, and policies. Those states are: Arkansas, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Nebraska, Nevada, New Jersey, North Carolina, North Dakota, Oklahoma, Rhode Island, South Dakota, Vermont, Washington, West Virginia, Wisconsin, and Wyoming. An associate member state is a State that has achieved substantial compliance with the terms of the Streamlined Sales and Use Tax Agreement taken as a whole, but not necessarily each provision, and there is an expectation that the state will achieve compliance soon. Those states are: Ohio, Tennessee, and Utah, *see* http://www.streamlinedsalestax.org (last visited Jan. 24, 2009).

[47] STREAMLINED SALES AND USE TAX AGREEMENT (adopted November 12, 2002, amended November 19, 2003 and further amended November 16, 2004) *available at* http://www.streamlinedsalestax.org [hereinafter SSUTA] (providing for fully digital compliance with sales and use taxes through certified intermediaries and certified software solutions).

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Certified tax software solution. This proposal requires each Member State to adopt a testing regime for the certification of enterprise-level transaction tax software.[48] The software to be certified would be comprehensive. Software must be able to: (a) determine the correct tax for each transaction and calculate the VAT amount due, (b) post this amount on the appropriate invoice, (c) link each VAT input or output amount to the correct VAT return, and (d) complete the VAT return accurately.

Business use of certified software should be voluntary. In some instances however, notably when an enterprise is heavily engaged in transactions deemed inherently prone to MTIC fraud – like tradable emissions permits, cell phones, or computer chips – a jurisdiction might make adoption mandatory. Another instance where mandatory adoption might be appropriate is after a judicial proceeding. The government could seek (as a fraud remedy) that a court require the taxpayer to adopt certified software "going forward," because of proven instances of fraud in the past.[49]

Although fundamentally a voluntary regime, financial incentives should be used to encourage certified software adoption. In addition, further incentives should encourage businesses to contract with trusted third-party service providers (CSPs) who would use certified software to meet all tax compliance obligations, as is the case under the SSUTA.[50] Under this

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[48]The SSUTA certification process involves measuring software against three third party standards; (1) the AICPA's SAS 94 [AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS, PROFESSIONAL STANDARDS, Vol. 1 AU § 319 *The Effect of Information Technology on the Auditor's Consideration of Internal Control in a Financial Statement Audit*, as amending SAS No. 55 *Consideration of Internal Control in a Financial Statement Audit*]; and (2) the US-GAO Federal Information Systems Control Audit Manual [U.S. GOVERNMENT ACCOUNTING OFFICE, ACCOUNTING AND INFORMATION MANAGEMENT DIVISION, FEDERAL INFORMATION SYSTEMS CONTROL AUDIT MANUAL, (FISCAM) Vol. 1 (GAO-AIMD12.19.6) *available at* http://www.gao.gov/special.pubs/ai12.19.6.pdf.]. In addition, software developers must comply with (3) ISO Number 17799 [INTERNATIONAL ORGANIZATION FOR STANDARDIZATION, ISO 17799: INFORMATION TECHNOLOGY, SECURITY TECHNIQUES, CODE FOR INFORMATION SECURITY MANAGEMENT (ISO/IEC 17799:2005)]. A discussion of similar standards for certification and accreditation of software can be found in the recent O.E.C.D. materials [*Electronic Commerce: Facilitating Collection of Consumption Taxes on Business-to-Consumer Cross-Border E-Commerce Transactions,* O.E.C.D. (Feb. 11, 2005) at 9 & 17-18 *available at http://www.oecd.org*. Indicating that, "… a global intermediary may be based in one country and would undertake intermediary activities in as many countries as suppliers are required to collect and remit consumption taxes on behalf of e-commerce suppliers. In cases where satisfactory levels of approval or financial security are evident, countries could be more relaxed …". The OECD discusses a range of government "approvals" for tax accounting software. At one extreme is "accreditation," an approval process functions simply as a mechanism to "formally identify" software that meets certain criteria of acceptability. At the other extreme is "certification," an approval process that designates software as "an officially authorized mechanism to perform specified functions."].

[49] This was the approach taken by Judge Lise Gaboury of the Court of Quebec in the fraud case against the 28 restaurant chain Casa Grecque. In this instance the fraud involved installing an automated sales skimming program called a Sales Zapper in the point of sale system (the networked electronic cash register). In the Budget Speech of March 23, 2006 the Minister of Revenue had announced the adoption of an automated system [*module d'enregistrement des vents*] that would be voluntary until 2011. Judge Gaboury noted that the system was expected to be available by October 1, 2008 and required all of the Casa Grecque restaurants to adopt it at this time as a condition of remaining in business. Revenue Quebec, *Des restaurants de la chaîne Casa Grecque coupables de fraude fiscal* (in French only) *available at*: http://www.revenu.gouv.qc.ca/eng/ministere/centre_information/communiques/ev-fisc/2006/10juillet.asp

[50] SSUTA provides for audit immunity when certified technology is used to determine the tax liability. It provides in §203 for Certified Service Providers (CSP) "[a]n agent certified under the Agreement to perform all the seller's sales and use tax functions, other than the seller's obligation to remit tax on its own purchases;" in §202 for

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structure the CSP becomes the taxpayer's agent for return preparation, submission, and remission of tax to the Treasury. Use of a CSP would function like an insurance policy against errors – it would indemnify the taxpayer.[51]

The government will want assurances that unauthorized changes could not be made to the software after certification is awarded. This is easily resolved. There are very cost effective and accurate security systems for tax software. The most notable has been developed by the German government to assure tamper-proof electronic cash registers and point of sale systems with smart cards.[52]

Under a certified tax software solution, enterprises that contracted with CSPs would be able to (a) assure the tax authority that the VAT was properly assessed, collected and remitted, (b) satisfy any due diligence requirement under joint and several liability provisions,[53] and (c) immunize itself from cash flow or other losses arising from an audit or investigation based on suspected MTIC fraud.[54]

Four examples. Under the examples developed earlier, if Member States were to adopt certified tax software regimes there are four possible permutations of transactions among enterprises using certified and non-certified tax software solutions. They are set out below using

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Certified Automated Systems (CAS) "[s]oftware certified under the Agreement to calculate the tax imposed by each jurisdiction on a transaction, determine the amount of the tax to remit to the appropriate state, and maintain a record of the transaction;" and §207 for Certified Proprietary System (CPS) a system owned by "[a] seller that has sales in at least five member states, has total annual sales of at least five hundred million dollars, has a proprietary system that calculates the amount of tax due each jurisdiction, and has entered into a performance agreement with the member states that establishes a tax performance standard for the seller."

[51] This is the approach under SSUTA's enabling Acts (specifically the Uniform Sales and Use Tax Administration Act, at §9(a)):

> A Certified Service Provider is the agent of a seller, with whom the Certified Service Provider has contracted, for the collection and remission of sales and use taxes. As the seller's agent, the Certified Service Provider is liable for sales and use tax due each member state on all sales transactions it processes for the seller except as set out in this section. A seller that contracts with a Certified Service Provider is not liable to the state for sales or use tax due on transactions processed by the Certified Service Provider unless the seller misrepresented the type of items it sells or committed fraud. In the absence of probable cause to believe hat the seller has committed fraud or made a material misrepresentation, the seller is not subject to audit on the transactions processed by the Certified Service Provider. A seller is subject to audit for transactions not processed by the Certified Service Provider. The member states acting jointly may perform a system check of the seller and review the seller's procedures to determine if the Certified Service Provider's system is functioning properly and the extent to which the seller's transactions are being processed by the Certified Service Provider.

[52] Mathias Neuhaus, Jörg Wolff & Norbert Zisky, *Proposal for an IT Security Standard for Preventing Tax Fraud in Cash Registers*, INFORMATION SECURITY SOLUTIONS EUROPE, Sept. 2009 (forthcoming, copy on file with author) (describing the German Ministry of Finance engagement of the German National Metrology Institute (Physikalisch-Technische Bundesanstalt to develop an operational smart card solution for cash register/ point of sale system fraud programs, and the "INSIKA" (INtegrierte SIcherheitslösung für messwertverarbeitende KAssensysteme) project that made this solution a reality in 2008 with an estimated cost of security at €30-50 per installation).

[53] VAT DIRECTIVE Art. 205; *see supra* notes 8 & 9, and accompanying text.

[54] *Commissioners of Custom & Excise v. Federation of Technological Industries* C-384/04 (May 11, 2006); [2006] ECR I-4191 (concerning a trade association and 53 members all traders in cell phones and computer chips in fact patterns based in "acquisition fraud" and "carousel fraud" with questions concerning the applicability of joint and several liability provisions in the UK VAT Act).

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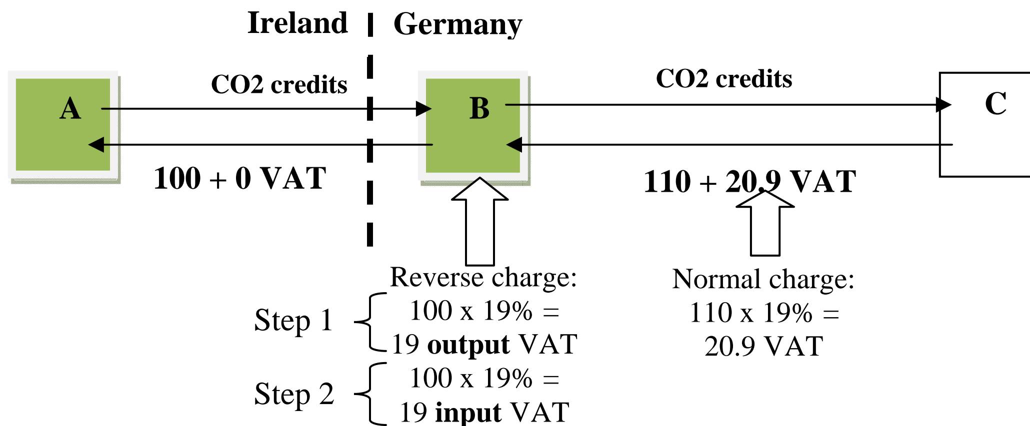
transactions between the Ireland and Germany. Any two Member States could have been selected (except for the Netherland, the U.K. and France as their VAT treatment of CO2 credits has changed).

Example One – Two certified systems. Assume A in Ireland sells CO2 credits to B in Germany. B then resells these credits to C, also established in Germany.



If both A and B use certified systems, and particularly if these systems are operated by trusted third-parties (CSPs) there is no possibility of MTIC fraud. When making the sale to B the tax calculation system in A will need to know if it should charge the Irish VAT or no VAT at all on the invoice. To do this A's system will need to know if B's system is certified.

There are a variety of ways to do this but the most proven and secure would be through the use of public key infrastructure (PKI).[55] A's system would access the public key associated with B and use it to confirm that B's system was certified. With this knowledge, A would then draft an invoice without VAT and forward it to B. In this way A would know that B's system would perform the reverse charge. The CSP at B would then assume full responsibility for filing the VAT return that included this charge, as well as remitting the VAT due to Germany.

In a sense this is simply automated due diligence. But in another sense, one that is critical for business, this is *certified* due diligence. The Irish certified system in A has not only received confirmation that B's system will correctly follow German law implementing the reverse charge, but it also has received confirmation that a German CSP has accepted full responsibility for paying any VAT due. MTIC fraud is not possible.

In an abundance of caution, it would be expected that B's certified system (when it is notified that A's system is checking for its' certification) will perform a reverse PKI inquiry. It

[55] PKI is information technology infrastructure that enables users of a basically unsecure public network (such as the Internet) to securely and privately exchange data through the use of a public and a private cryptographic key pair that is obtained and shared through a trusted authority. In this case the trusted authority would be the Member State that certifies the transaction tax software in the target entity.

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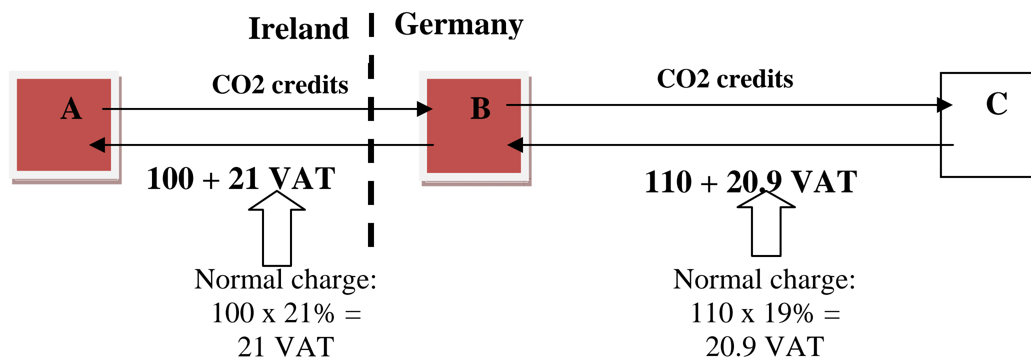
would want to determine (in advance) that the invoice it is receiving (without VAT) from Ireland is correctly issued. This will be the case if the Irish system has been certified by the Irish Treasury.

When B sells onward to C in Germany for 110, B's certified system will charge 20.9 in VAT. The entire amount of VAT collected on this sale will be remitted by B's CSP.

This is the ideal situation. Incentives are built into the system to encourage businesses to voluntarily migrate to certified software and the use of CSPs. It should be noted also that there is no need to change anything with respect to B's onward sales to C.

Example Two – No certified systems. Assume the same facts as above – A in Ireland sells CO2 credits to B in Germany. B then resells these credits to C, also established in Germany.



If neither A nor B use certified systems there is a high possibility of MTIC fraud in the CO2 permit market. Under this situation the place of supply for the CO2 credits is Ireland, and the 21% Irish VAT will be imposed. The invoice from A to B will include a VAT charge.

This may not be an optimal VAT compliance profile for B. If B already files an Irish return complications are reduced, but if not, B will need to file for a refund under the Eighth Directive.[56]

If this is too burdensome there are two readily available options (short of adopting a certified tax compliance system). B could either purchase the CO2 credits from a domestic seller, or B could purchase the Irish credits indirectly. In other words B could try to become like "C" in example 1.

To accomplish this B would need to purchase A's CO2 credits from another German entity (one that used a certified system). This party (an intermediary) would purchase from the Irish seller and immediately re-sell to B. It would probably become common for brokers or the

[56] VAT DIRECTIVE Arts. 170 & 171; detailed implementation rules are in the Eighth Directive 79/1072/EEC, 1979 O.J. (L 331) 11, *available at*: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1979L1072:20070101:en:PDF

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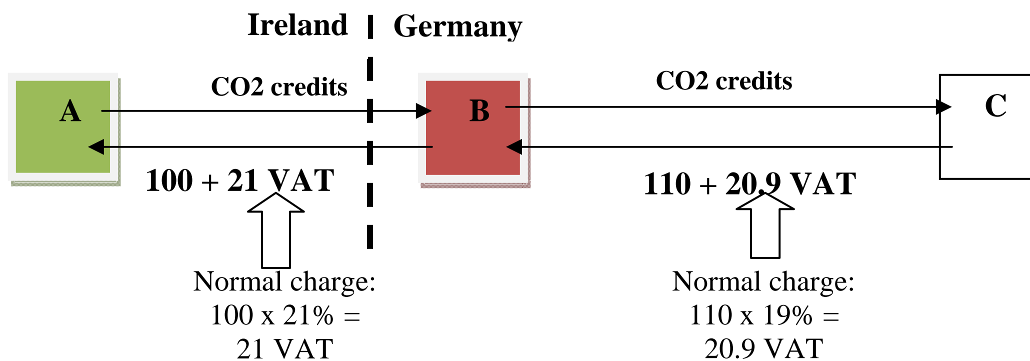
exchange on which these permits ar traded to offer (for a minimal fee) the services of a local intermediary (who would have a certified system) from whom a domestic purchaser could make secure secondary purchases.

Admittedly this would be a VAT compliance burden, as well as a burden on the CO2 markets. But these burdens need to be weighed against the *revenue* and *market* threat posed by MTIC fraud. The overall intent of this proposal is to use the marketplace to channel high-risk purchases of CO2 credits through low-risk/no-risk channels. There is a cost, but it is a minimal cost.

Stated yet another way, this proposal removes the nearly impossible burden of performing due diligence on a remote purchaser of CO2 permits by foreign sellers. The threat of joint and several liability for sellers that do not (or cannot) perform adequate due diligence on their buyers may account for the dramatic fall in trading on the BlueNext exchange on Wednesday June 3rd (when trading volumes fell to 2.5 million credits from the previous day's high of 19.8 million credits). Without a resolution, MTIC may well destroy the international dimension of the CO2 tradable permit market.

To finish this example, when B sells onward to C in Germany for 110, B will charge 20.9 in VAT. B will have an output credit in Germany that will not be easily offset with the input credit it has in Ireland. Because this is not an ideal situation B is encouraged by the structure of the system to purchase CO2 permits in a less MTIC-risky manner.

Example Three – Seller (only) with a certified system. Assume the same facts – A in Ireland sells CO2 credits to B in Germany. B then resells these credits to C, also established in Germany.



If A (but not B) uses a certified system the Irish VAT will be charged on the invoice. A's certified system will not be able to find German certification for B when it makes a PKI-based search for B's certificate.

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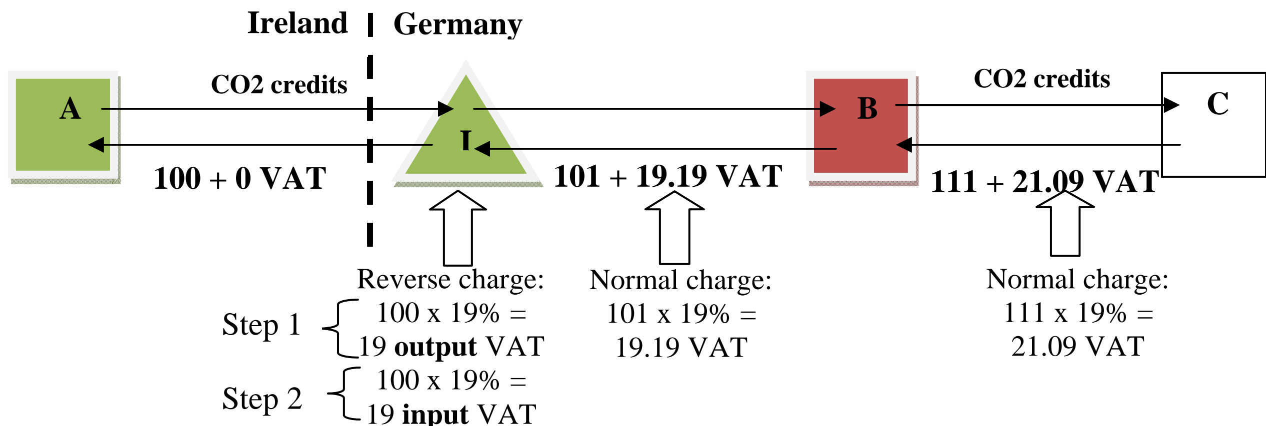
A's CSP will then submit returns and pay over the VAT collected on this transaction to the Irish Treasury. The place of supply of this service is necessarily in Ireland. B will be in the same situation as in example 2.

It is very likely in this situation, if B has identified a seller of CO2 permits from whom it would like to make a purchase, that it will find a way (maybe with the assistance of a broker) to move into a "C" position. If a certified intermediary is interposed between B and A in this transaction then the possibility of MTIC fraud will be eliminated, and B (now functioning like a "C") will purchase domestically and pay German VAT to the intermediary.



Assume the cost of the Intermediary (I) is 1, and further assume that this cost is passed through the system. As in example 1 the certified system in A will recognize the certified system in I and no VAT will appear on the invoice. The place of supply is Germany determined under article 56. A reverse charge is applied by the intermediary and both input VAT as well as output VAT is imposed on the 100 purchase price. At this point, I's return should be a complete wash.

However, there is an immediate resale to B. The price of the intermediation service (1) will be embedded in the cost of the CO2 permits and this will make the invoice price 101. The place of supply on this supply is Germany, determined under article 43.

I's CSP will file a German return with output VAT of 19.19 (the onward sale to B). The I's CSP will remit the entire amount of VAT. If B is involved in a further onward sale of the CO2 credits to C (also in Germany), then B will collect VAT of 21.09 on the price of 111. B will have paid a VAT of 19.19 which it will take as a credit against the VAT of 21.09 it is collecting. A net amount of 1.9 will be remitted to the government.

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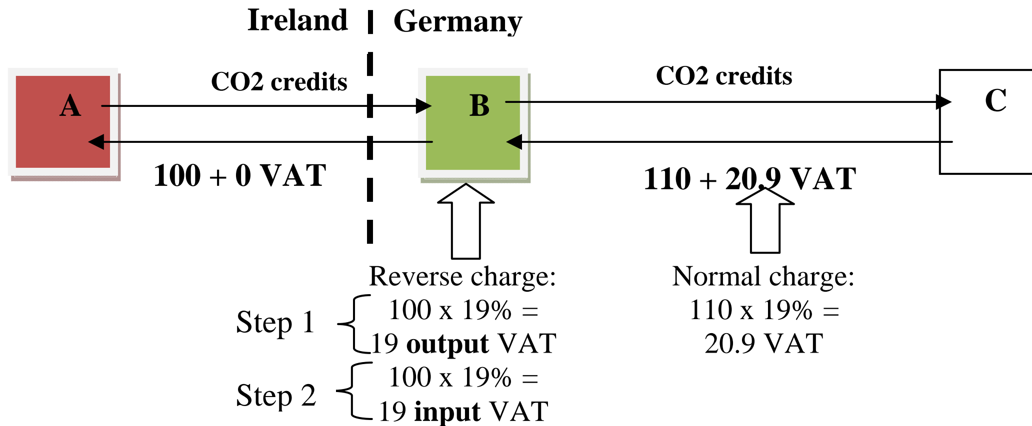
Example Four – Buyer (only) with a certified system. Assume the same facts – A in Ireland sells CO2 credits to B in Germany. B then resells these credits to C, also established in Germany. Example four is not the mirror opposite of Example three. There are some interesting differences.



If B (but not A) uses a certified system, then it is possible that A can find this out through a PKI-based search. It is not necessary to have a certified system to determine whether or not your buyer is using one. B's certification is proof that German tax rules will be complied with by B.

If A knows that B's automated system will perform the reverse charge, and if B's CSP will file the return and remit appropriate taxes, then this should be sufficient for the Irish Treasury to know that A has performed due diligence on the intra-community sale. If so, Ireland could find it appropriate for the place of supply for these CO2 permits to be determined under article 56. If so, B would be in the same situation as it would be in example 1.

If not, then either A would find itself in a situation like it was in Example 2 (Irish VAT will be applied to the intra-community sale to B), or A will secure an intermediary (probably through its broker or the exchange it is trading on) who will have a certified system, and the A to B transaction will be processed through the intermediary. This hypothetical assumes that the charge for using the intermediary is 1, and that this amount will be passed through to C.

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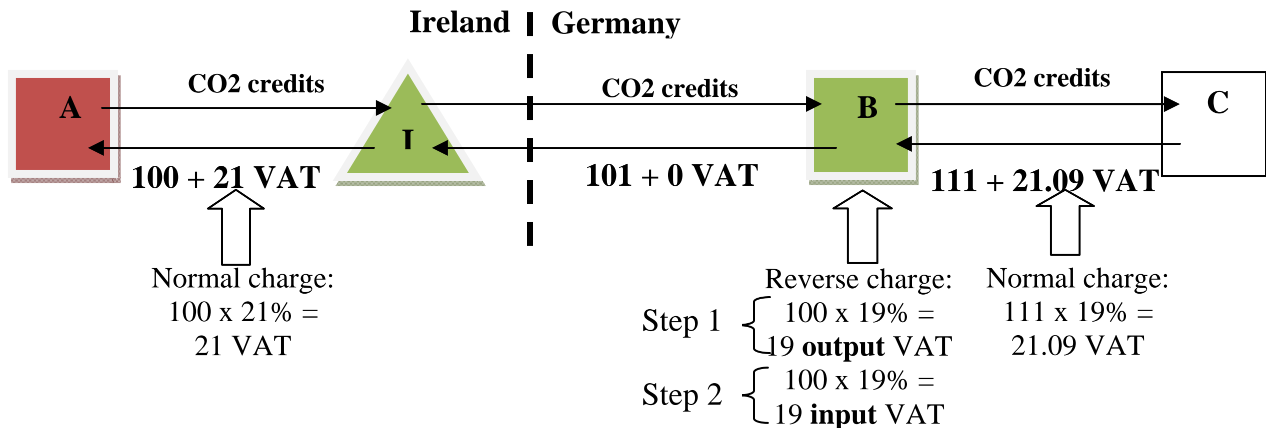

CONCLUSION

The recent appearance of MTIC fraud in tradable CO2 permits is a threat to revenue as well as a viability threat to the newly developed system for global trading in CO2 emission allowances. The European market is currently the world's largest. It has seven active exchanges and aggregate trade volume exceeds $92 billion. Having the CO2 emissions spot market in the largest of these exchanges (BlueNext) shut down simply on the rumors of MTIC fraud underscores the seriousness of this issue.

The door to MTIC fraud was left open by the collective decision of EU Member States to treat tradable carbon credits as taxable services with sourcing determined under article 56 (the place where the buyer is established). Onward sales would be treated under article 43.[57] The fatal nexus of having a buyer perform a reverse charge on purchases of CO2 credits and then collecting VAT on an onward sale is the breeding ground for MTIC. With large volumes, and high values being traded on fast and efficient exchanges, a fraudster can easily step in buy/sell a large number of permits and then disappear. Applying the techniques of contra-trading developed in the cell phone and computer chip MTIC trade there would be no need to wait for a refund checks if a carousel fraud in CO2 permits was set up; VAT would be simply offset through another entity as in *Olympia Technologies, Ltd*.[58]

Tax administrations may not always be able to anticipate where the next market for MTIC fraud will develop, or where the door has been inadvertently left open to this fraud, but when it appears it is very clear that tax authorities need to act fast. This is the story of the BlueNext exchange during the first Monday and Tuesday of June 2009.

Although the French, the Dutch, and the U.K. (as of July 31, 2009) all took different roads to closing the MTIC door, it is difficult to support any of them (exemption, zero rating or full reverse charge) as a long term solution.

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[57] Overview Report: Legal Framework for Emissions Trading in the European Union (2006) 9-12 *avaialble athttp://akseli.tekes.fi/opencms/opencms/OhjelmaPortaali/ohjelmat/ClimBus/fi/Dokumenttiarkisto/Viestinta_ja_aktivointi/Julkaisut/Projektiaineistot/2005/Raportit/Legal_Overview_Report.pdf.*

[58] *See supra* note 11

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The French/U.K. solution removes CO_2 permits from the ambit of the VAT. The French approach burdens traders with non-recoverable VAT on overhead and other expenses. The UK removes this burden, but does so at the expense of the tax due on related taxable supplies. In the long run the French solution may make BlueNext a less desirable place to do business than the Climate Spot Exchange in London. But both the French and the U.K. treatment puts them at odds with the treatment in most other exchanges.[59]

The Dutch approach only impacts domestic treatment of CO_2 permits (requiring a reverse charge on onward domestic sales) but if this approach is replicated each time a new MTIC incident arises in a different good or service it will eat away at the foundations of the fractionated payment system upon which the EU VAT was built.

This paper suggests an alternative, a *certified tax software solution*. It is a long-term solution that heals the break in fractionated payments. If implemented it would (over time) provide the EU with a self-monitoring digital mechanism to prevent MTIC; one that would operate at the level of the self-interested business decision-making that has always been the hallmark of the EU VAT. It would have tax administration benefits well beyond the MTIC fraud area as broad certification of business systems, would carry with it indemnity benefits for businesses as well as automated return filing, and funds transfers by trusted third-parties. VAT compliance would be highly efficient.

The difficulty with the certified tax software solution is that MTIC frequently requires an immediate response. As the events of June demonstrate just the hint of MTIC can destroy a critical market, and as the *Federation of Technological Industries* case demonstrates aggressive auditing on a joint and several liability basis can cripple legitimate businesses caught up in MTIC fraud. In contrast, the strongest attribute of both the French/U.K. and the Dutch approaches is the speed with which they have been implemented.

As a result, the best solution to MTIC would be a combination – a two-step approach. A short term solution (exemption, zero rating, or domestic reverse charge) would give immediate relief. It should be announced as temporary solution at its inception, in conjunction with a declared intent to institute a long term solution involving certification and third-party intermediaries. A time schedule for implementation would be needed, but this MTIC suppression package would be effective. Enterprises will need time, but they should be allowed to opt into the long term solution as soon as their systems are certified.

The U.K. appears to be looking for something better with respect to MTIC fraud. It is currently employing the reverse charge in cell phones and computer chips, has rejected that approach for tradable CO_2 permits, and is implementing a zero-rate solution instead. As HMRC's Revenue and Customs Brief 46/09 indicated:

> In response to the escalating threat of VAT fraud in connection with trading of emissions allowances (often called 'carbon credits'), the Government has

[59] OECD, CENTER FOR TAX POLICY AND ADMINISTRATION, COMMITTEE ON FISCAL AFFAIRS, TAXATION AND TRADABLE PERMITS (Note by the Secretariat) *supra* note 16, at 5, Table 1, reproducing Annex 2, *Reply to Survey* (preserving the survey conducted by Working Party 9 as discussed at a meeting held on March 25-26, 2009).

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> introduced legislation to zero rate the supply of emissions allowances within the UK with effect from 31 July 2009. *This is an interim measure* that the Government expects to remain in force *until an EU-wide solution is implemented*. It follows similar action taken by France and the Netherlands earlier in the summer. The UK has applied to the EU for a retrospective derogation to remove VAT from these products.[60]

If the U.K. solution is indeed an *interim* one, and if the U.K. is right that there will be a better long-tem *EU-wide solution* to MTIC fraud, then perhaps a certified tax software approach is worth considering.

[60] HMRC, REVENUE & CUSTOMS BRIEF 46/09, *supra* note 5 (emphasis added).

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