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by Richard T. Ainsworth

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Carousel Fraud in the EU: A Digital VAT Solution

by Richard T. Ainsworth

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The future of the VAT is digital.¹ In the foreseeable future, all VAT processes will be automated. VAT determinations, collection, the remission of funds, as well as all reporting, audit, and refund activities will be digitized.² Certified proprietary and third-party software systems will perform

¹A digital VAT is inevitable simply because modern business systems are digital. In 2000 the University of California at Berkeley's School of Information Management Systems conducted the first study of newly created information and demonstrated that 93 percent of the three billion gigabytes of data generated worldwide (using 1999 data) was computergenerated. Updated in 2002, a new study reached much the same conclusions, and indicated (using 2001 and 2002 data) "about 5 exabytes of new information [was] created in 2002. Ninety-two percent of the new information was stored on magnetic media, mostly hard disks. . . . film represented 7% of the total, paper 0.01%, and optical media 0.002%." Thus, it may be presumed that almost all enterprise-source data content for operations, accounting, audit, as well as tax filing, financial reporting, regulatory submissions, and almost all other purposes is digitized both in generation and in storage. Eric Woodman, Information Generation: Berkeley study measures gargantuan information boom, EMC2, available at http://www.emc.com (last visited Mar. 20, 2006), referencing School of Information Management and Systems at the University of California at Berkeley, "How Much Information?" (2000). Peter Lyman and Hal R. Varian, Executive Summary, School of Information Management and Systems at the University of California at Berkeley, "How Much Information?" (2003) (Oct. 27, 2003) available at http://www.sims.berkeley. edu (last visited Mar. 20, 2006).

²The OECD published two guidance notes in May 2005 that set out a comprehensive description of the standard audit file for tax compliance checking and standards to be applied to the development of tax accounting software. See "Guidance for the Standard Audit File — Tax; Guidance on Tax Compliance for Business and Accounting Software," available at http://www.oecd.org (last visited Mar. 20, 2006).

all critical VAT functions for large and small taxpayers at minimal cost under real-time compliance conditions. Government-to-government information exchange will be immediate.

The European Union is transitioning to a digital VAT now.³ Analogous, fully digital consumption tax systems are already in place and functioning in the retail sales tax in several American jurisdictions.⁴

Carousel fraud exploits the lingering noncertified, nondigital attributes of the EU VAT at an estimated annual cost of 10 percent of net VAT

³Digitizing the VAT in Europe is part of the "Lisbon Strategy" (European Commission, *eEurope* — *An Information Society for All*, COM(2000) 130 final). The goal is to make the European Union a more competitive, dynamic knowledge-based economy, with improved employment and social cohesion by 2010. (Communication from the commission to the council, the European Parliament, the Economic and Social Committee, and the Committee of the Regions, *eEurope 2005: An Information Society for All. An Action Plan to be Presented in view of the Sevilla European Council*, 21/22 June 2002. COM(2002) 263 final).

Numerous changes have been made in the Sixth Directive in line with the Lisbon Strategy. The "Invoicing Directive," Council Directive 2001/115/EC of December 20, 2001 (2001/115/EC, 2002 O.J. (L 15) 24) and the "Digital Sales Directive," Council Directive 2002/38/EC of May 7, 2002 (2002/38/EC, 2002 O.J. (L 128) 41 were crucial to moving the European VAT in the digital direction. Together they provide for digital notices, digital returns, and digital periodic and recapitulative statements, as well as digital third-party prepared invoices.

⁴The Streamlined Sales and Use Tax Agreement (SSUTA) came into effect on October 1, 2005. SSUTA began in March 2000 as the Streamlined Sales Tax Project. It responded to the states' perception that they were losing sales tax revenue from increasing online sales. A centralized online registration system and an amnesty for qualifying sellers came into effect, but the certification of software service providers that was expected in 2005 was delayed until April 2006. The SSUTA has an initial governing board of 18 states: Arkansas, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Nebraska, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Utah, West Virginia, and Wyoming. The stated goal of SSUTA is to simplify and modernize sales and use tax administration. When fully operational, it's expected to reduce the burden of tax compliance on all sellers by fully digitizing the retail sales tax process. See http://www.streamlinedsalestax.org.

Tax Notes International May 1, 2006 • 443

receipts.⁵ In the United Kingdom alone, carousel fraud cost the Exchequer between £1.12 billion and £1.9 billion in the 2004-2005 financial year, and it is considered to be the cause of the first annual fall in VAT revenues since the tax was introduced in the United Kingdom.⁶ This article proposes that carousel fraud be eliminated in the European Union through selective insertion of digital VAT⁷ functionality into the current system. In other words, it is proposed that the digital future be accelerated. The cost of that implementation would be minimal when compared to current revenue losses.

Carousel Fraud

Carousel (missing trader intracommunity, or MTIC) fraud works when a seller (A) in member state X makes an exempt intracommunity supply of goods to a (soon to be) missing trader (B) in member state Y. B acquires the goods without paying VAT and later makes a domestic supply to a third company (C). C is frequently called the broker. B collects VAT on its sale to C, the broker, but doesn't pay the VAT to the government. B disappears with the VAT.

When C claims an input credit on the VAT it paid to B, the missing trader, the government suffers the loss. In a fully operational carousel, C will resell the goods back across the border to the initial seller, A. That sale is also an exempt intracommunity supply. The same goods can then be sold once again on the carousel to B. When A, B, and C are operating in tandem and are aware of the fraud, it's a relatively

 5Report from the commission to the council and the European Parliament on the use of administrative cooperation arrangements in the fight against VAT fraud, COM(2004) 260 final at 5

⁶"The [U.K.] government has suffered its first annual fall in VAT revenues since it started collecting the tax in 1973 because of a big rise in so-called 'carousel' fraud, raising fears that the scams are spiralling out of control.

Official data yesterday showed that VAT revenues tumbled nearly 14 percent in March compared with March last year. In the full fiscal year they were down 0.2 percent to £72.9bn—the first full-year drop. The fall in revenues is remarkable given that the economy has had two severe recessions since the early 1970s that did not cause VAT revenues to drop." Ashley Seager and Angela Balakrishnan, "Fears Over Fraud as VAT Receipts Slump," *The Guardian* (Apr. 25, 2006) at 1, available at http://www.guardian.co.uk/frontpage/story/0,, 1760816,00.html.

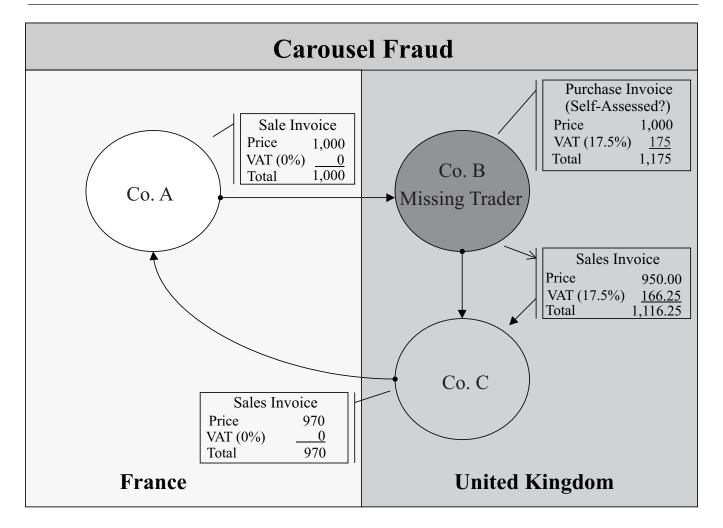
⁷A digital VAT has been proposed as a new U.S. federal level tax to the President's Advisory Panel for Federal Tax Reform. Richard T. Ainsworth, "The Digital VAT: A Proposal for the President's Advisory Panel on Federal Tax Reform" ("A Digital VAT (D-VAT) for the U.S.?" Tax Notes, Aug. 22, 2005, p. 938). The detailed proposal is available at Richard T. Ainsworth, "The Digital VAT (D-VAT)," Virginia Tax Review (2006), forthcoming.

easy matter to apply joint and several liability provisions and hold C liable for the VAT not remitted by $\rm B.^8$

A common practice has developed whereby legitimate companies called "buffers" are placed between the key operatives in the scheme to both distort trading patterns and make investigations difficult, and to make it more difficult to apply the joint and several liability provisions in VAT statutes. Buffers may be completely unaware of the fraud, although with the irregularity of the transactions, they may suspect, but have no direct knowledge, that something is amiss.

The diagram above illustrates a typical carousel fraud scheme. Company A in France sells to Company B in the United Kingdom goods that are invoiced at 1,000. Because this is an intracommunity supply, the supply is zero-rated out of France, and Company B is obligated to self-assess the VAT due — (17.5 percent)(1,000) = 175. This amount is never reported or remitted to the government as Company B intends to become a "missing trader." Seeking an immediate resale, Company B sells the goods to Company C at 950, collecting VAT on the invoice issued — (17.5 percent)(950) = 166.25. The total received by B will be 950 + 166.25 = 1,116.25. This amount is sufficient for Company B to pay the invoice to Company A (1,000) and retain the difference (116.25). To complete the carousel, Company C would sell the same goods back to Company A for 970, allowing a modest profit of 20. Because this sale is an intracommunity supply, the amount will be zero-rated. Company C will file a return seeking a full refund. It will provide valid invoices that show an input VAT payment of 166.25 against an output VAT of zero.

⁸On March 14, 2006, Advocate General Ruiz-Jarabo Colmer of the European Court of Justice issued an opinion in the joined cases of Axel Kittel and Recolta Recycling (Cases C-439/04 and C-440/04). Those cases considered the effectiveness of joint and several liability provisions in a range of carousel fraud permutations. Referring to the earlier judgment of the ECJ in the joined cases of Optigen, Fulcrum, and Bond House Systems (Cases C-354/03, C-355/03, and C-484/ 03), the AG concluded that a taxable person who in good faith purchases goods without knowledge of a fraud committed by the seller cannot be deprived of the right to deduction. However, the AG distinguished between when a taxable person is aware of fraud, but stands apart (without gaining any advantage), and when a taxable person actively participates in the fraud and gains advantages unlawfully. In the latter situation, if a member state had introduced joint and several liability based on article 21(3) of the Sixth Directive, legal sanctions under joint and several liability provisions would apply. According to the AG, two indicators are of special interest — the illegal benefit to the person claiming the right to deduction and his closeness to the fictitious operation.



Proposed Solutions

The 1993 abolition of border controls between member states removed the administrative mechanism that verified entitlement to zero rating upon export, as well as the obligation to pay VAT on import. VAT payment is now deferred when goods cross EU borders. That deferral breaks the VAT chain at a particularly vulnerable spot: the interface of domestic and foreign tax administrations. Considered theoretically, deferral is a major exception to the fractional payment principle on which the VAT is based. It should surprise no one that this change opened the door to carousel fraud.

The search for solutions has taken two paths, one in the structure of the tax, the second in its administration. Structural solutions don't have full support of the European Commission. Some of those solutions fragment the system even more by increasing (rather than decreasing) the volume of VAT-free commodities in circulation. Others impose unacceptably high burdens on honest traders. The commission's preference is for administrative solutions.

Unfortunately, those solutions rely on a degree of technological agility and intergovernmental cooperation that currently appears more aspirational than realistic.

The Ifo Institute for Economic Research at the University of Munich examined structural solutions to carousel fraud at its Tax Policy Conference on September 29, 2003. The proposals included: the Mittler model, a preliminary stage exemption for transactions between businesses with input-tax deduction rights; a reverse charge with input tax settlement model; and a reverse charge with joint and several tax liability model. Hans-Werner Sinn, president of the Ifo Institute, presented two additional "pay first" models: a model requiring actual payment of VAT on all (or selected) intracommunity

Tax Notes International May 1, 2006 • 445

⁹Andrea Gebauer, Chang Woon Nam, and Rüdiger Parsche, Can New Models of Value Added Taxation Stop the VAT Revenue Shortfalls? 8-12, 60th Congress of the International Institute of Public Finance, Aug. 23-26, 2004, Thailand.

transactions, and a model tying input credit deductions to the actual remission of VAT by the supplier. 10

A common practice has developed whereby legitimate companies, called 'buffers,' are placed between the key operatives in the scheme.

When the commission took up the carousel fraud issue soon after the conclusion of the Ifo conference. it responded to each proposal and pronounced none of them to be compelling.¹¹ The commission recommended that administrative steps be taken to make intensive use of the administrative cooperation machinery, allocate more human resources to multilateral controls, reduce the average response time to mutual assistance requests, adopt computerized auditing techniques as soon as possible, and set up national fraud departments empowered to exchange information with other member states.¹² In the commission's view, new Regulation (EEC) 1798/ 2003, which entered into force on January 1, 2004. was positioned to resolve the VAT fraud problem through the facilitation of substantive information exchange under clear procedures and binding rules.13

Response of the Member States

Revenue pressures forced the member states down both paths. Greater effort has gone into audit enforcement¹⁴ and information exchange. Simultaneously, statutory changes have been proposed and implemented. Joint and several liability provisions have been added,¹⁵ but the favored change appears

to be the adoption of domestic reverse charge procedures similar to those discussed at the Ifo conference. ¹⁶

Article 21(1)(a) allows the general application of the reverse charge mechanism to all supplies made by nonresident suppliers deemed to be made within a member state. Belgium, the Netherlands, and Spain have recently availed themselves of that option. France will do the same, effective September 1, 2006.¹⁷

Austria has been the leading advocate for extending the reverse charge mechanism between resident businesses in industry segments where missing traders are common. Austria selectively derogated from article 21(1)(a) in the construction sector. The Austrian target was the subcontractor that frequently went missing after providing services for a general contractor. 18 Latvia has approached the commission for a similar derogation, but one that would cover supplies of goods and services for timber transactions. 19 Lithuania has also requested permission to derogate for timber, as well as for subcontractor construction work, supplies of goods and services under an insolvency proceeding, and supplies of ferrous waste and scrap.²⁰ The United Kingdom has submitted a request to apply a domestic

tax — Common system of value added tax: uniform basis of assessment (77/388/EEC) 1977 O.J. (L 145) 1; article 21(3) generally allows member states to provide that someone other than the person liable for payment of the VAT be held jointly and severally liable. Thus, the United Kingdom recently added joint and several liability provisions (VAT Act of 1994, section 77A (U.K.)). Those provisions apply to businesses that receive supplies of telephones, telephone parts, and accessories, as well as computer equipment and parts, accessories, and software made after April 10, 2003. To be liable, the business must know or have reason to suspect that the VAT would go unpaid.

¹⁶Fully developed, the reverse charge procedures under discussion at the Ifo conference involve a system of "R-numbers" issued to enterprises entitled to claim an input credit. Sellers would use an online system to verify whether or not a buyer was entitled to purchase goods tax-free. Hans-Werner Sinn, *supra* note 9, at 30.

 $^{17} \rm Patrick$ Donsimoni, "Finance Act Introduces VAT Reverse Charge Mechanism," Tax Notes Int'l, Jan. 23, 2006, p. 266.

¹⁸Prof. Markus Achatz, Linz University, reported on the Austrian successes with the reverse charge in the construction industry at the Ifo's Tax Policy Conference.

¹⁹Commission of the European Communities, proposals for a council decision authorizing Latvia to extend the application of a measure derogating from article 21 of the Sixth Council Directive 77/388/EEC on the harmonization of the laws of the member states relating to turnover taxes, COM(2005) 376 final (Aug. 18, 2005).

²⁰Commission of the European Communities, proposals for a council decision authorizing Lithuania to extend the application of a measure derogating from article 21 of the (Footnote continued on next page.)

¹⁰Hans-Werner Sinn, Andrea Gebauer, and Rüdiger Parsche, The Ifo Institute's Model for Reducing VAT Fraud: Payment First, Refund Later, CESifo Forum (Feb. 2004) 30-34 available at http://www.ifo.de/pls/guestci/download/CESifo% 20Forum%202004/CESifo%20Forum%202/2004/forum2-04-specials1.pdf.

¹¹COM(2004) 260 final, *supra* note 5, at 17.

 $^{^{12}}Id.$ at 19.

¹³*Id*. at 7.

 $^{^{14} \}rm{For}$ example, AGI~Online reports that on March 28, 2006, Italian finance police shut down a €35 million carousel fraud scheme in Rome that specialized in the fraudulent importation of information technology and electronic goods, available at http://www.agi.it/english/news.pl?doc=20060328 1644-1168-RT1-CRO-0-NF11&page=0&id=agionline-eng. oggitalia.

¹⁵The Sixth Council Directive of May 17, 1977, on the harmonization of the laws of the member states on turnover (Footnote continued in next column.)

reverse charge covering computer chips, cell phones, and other electronic items.²¹ Although opposed to the proliferation of exceptions to the principle of fractional payment, the commission has proposed optional use of the reverse charge mechanism in the seven discrete categories that have been the subjects of frequent derogation requests.²²

A Digital Solution

The superiority of the Ifo Institute's "payment first, refund later" model is that it "remains as close as possible to the present system."²³ Its most significant drawback is that an actual payment system puts unacceptably high cash flow demands on legitimate businesses. Based on those concerns, the International Monetary Fund has recommended against adoption of a similar system.²⁴

However, if the Ifo Institute's proposal is stripped to its essentials, it's a proposal premised on *assurance*, not necessarily on *payment*. What it seeks to provide is assurance that the VAT is collected, and assurance that the collected VAT is remitted to the government. What if that level of assurance could be secured administratively — that is, without instituting a system of actual payments?

Trusted third parties operating in a certified environment can and do provide that level of assurance in the United States. Thus, certified technology

Sixth Council Directive 77/388/EEC on the harmonization of the laws of the member states relating to turnover taxes, COM(2006) 704 final (Jan. 10, 2006).

and trusted third-party service providers should be able to do for the European Union what they're doing for the United States. If adopted, it would eliminate carousel fraud. The American model is the streamlined sales tax (SST).

From a European perspective, the SST is an enhanced analogue of the digital sales directive.²⁵ The critical difference is the American adoption of certified solutions — certification of transaction tax software and certification of service providers who function as trusted third-party intermediaries. The SST became operational late in 2005 with the adoption of the Streamlined Sales and Use Tax Agreement by at least 10 states and 20 percent of the U.S. population.

A certified digital VAT/trusted third-party system would eliminate carousel fraud in all targeted business segments.

Article 26c of the Sixth VAT Directive provides for an elective, fully digital compliance regime for crossborder transactions between businesses not established in the European Union and final consumers. What would happen if the European Union were to adopt a program that contained all the elements of article 26c,26 but that would be mandatory for designated taxpayers (taxpayers from suspect industries like computer chips or cell phones in the United Kingdom, timber in Latvia and Lithuania, subcontractor services in Austria), would require the use of certified software by those enterprises in their tax determinations, and would require that those enterprises use trusted third-party intermediaries for all of their VAT compliance obligations (payments as well as refunds)?

Would that technology-intensive solution — borrowed from the SST, merged with the Ifo Institute's proposals, and targeted at potential carousel fraud operators — be able to eliminate carousel fraud? Would it be an appropriate administrative replacement for the paper-based, physical inspection of the border controls of 1993 that created the opening for carousel fraud in the first place?

Tax Notes International May 1, 2006 • 447

²¹Her Majesty's Revenue and Customs, "BN 46 — Introduction of a Change of the Person Responsible for Accounting for and Paying the VAT on the Sale of Certain Goods," available at http://www.hmrc.gov.uk/budget2006/bn46.htm.

²²Commission of the European Communities, proposals for a council decision amending Directive 77/388/EEC as regards certain measures to simplify the procedure for charging value added tax and to assist in countering tax evasion and avoidance, and repealing certain Decisions granting derogations, COM(2005) 89 final (Mar. 16, 2005).

²³Hans-Werner Sinn, *supra* note 9, at 31.

²⁴The Ifo Institute's model has some similarity to the VAT bank system adopted by Bulgaria in July 2002. The Bulgarian system requires each taxpayer to open a VAT bank account into which all VAT receipts and payments are made. The Bulgarian system is not the strict "payment first" system advocated by the Ifo Institute, because input credits are not denied to any purchaser who follows procedures and makes payments into seller's VAT bank account. Nevertheless, the IMF recommends against this approach because of the "loss of working capital — business enterprises have identified this as the most significant cost. Because funds held in VAT bank accounts are frozen, businesses could, potentially, be forced to seek short-term loan funds to support their cash flow needs." Graham Harrison and Russell Krelove, VAT Refunds: A Review of Country Experiences, IMF Working Paper WP/05/218 (Nov. 2005) 31-33, 32.

²⁵Sixth Council Directive, *supra* note 14, at article 26c.

²⁶The proposal would be a little broader than simply mandating article 26c. It would need to mandate the adoption of digital notices, digital returns, and digital periodic and recapitulative statements (Council Directive 2002/38/EC). Also, the use of digital invoices would be required (Council Directive 2001/115/EC) and provided by the trusted third-party intermediary.

Certification of tax compliance software is not just an American idea. The OECD released two reports in May 2005, Guidance on Tax Compliance for Business and Accounting Software and Facilitating Collection of Consumption Taxes on Business-to-Consumer Cross-Border E-Commerce Transactions. Both reports anticipate the certified software and trusted third-party solution.

Under the model proposed here, the European Commission would need to engage in a software and trusted third-party certification program. Multiple providers should be certified. Instead of allowing derogations from the Sixth Directive to combat carousel fraud, the commission should direct member states to technological and trusted third-party solutions, allowing use of those solutions to be required by selected enterprises or commercial sectors heavily engaged in suspect transactions. Enforcement would come through denial of input credits based on the insufficiency of the invoice if enterprises required to report within the system remained outside.

Under the SST, proper use of certified software effectively insulates the taxpayer from liability for any errors in determining the proper tax due; certified third-party collecting agents are deemed directly liable to the government for the taxes on all the transactions they process. They literally assume all of the vendor's tax collection functions. What makes that system particularly attractive to businesses is that the SST provides those services to vendors at no cost.

Specific Application

A certified digital VAT/trusted third-party system would eliminate carousel fraud in all targeted business segments. As set forth in the earlier example, carousel fraud works when a seller in member state X zero rates and sells goods to a buyer in member state Y, who immediately resells the same goods,

collects the appropriate VAT, and disappears without filing a return, remitting VAT on purchases, or reporting the VAT collected on sales.

Under the system proposed here, a business engaged in the intracommunity sale of computer chips in member state X, for example, would be notified that it was required to install certified VAT software in its enterprise resource planning system or access a free online encrypted program that would determine its VAT compliance (calculate the VAT, issue electronic invoices, and submit VAT returns, as well as VAT Information Exchange System Intrastat reports). Failure to do so would result in an inability to zero rate its intracommunity sale of computer chips. Purchasers of computer chips in member state Y would be similarly notified. Failure on the part of the buyer to use a certified system or to submit VAT returns through a certified service provider would result in denial of input credits on the forward sale of chips within member state Y.

Under that proposal, the free market acts as an enforcement buffer between the taxpayer and the tax administration. Because certified service providers will assume all VAT filing and payment obligations of the taxpayer, the private sector will sort out legitimate traders from illegitimate ones. Private security arrangements will be worked out in advance among legitimate businesses that will place funds at the disposal of the intermediary in time to make payment with timely returns. In a worst-case scenario, taxpayers will be in the same position with cash flow and VAT compliance as they were before the proposal was in place. However, in most cases, they will be in a better position. They will no longer be subject to audit or be responsible for determining taxable amounts, submitting returns, or making timely payments of funds. Not only will the burden of compliance be lifted, but the cost and risks associated with VAT compliance will be significantly reduced.

448 • May 1, 2006 Tax Notes International