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DIGITAL VAT AND DEVELOPMENT: D-VAT AND D-VELOPMENT

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DIGITAL VAT¹ AND DEVELOPMENT

INTRODUCTION

Since the e-commerce revolution began in the 1990's, tax policy discussions in developed economies have enlisted "e-solutions" to streamline consumption tax administration, as well as to resolve technical problems. These well-considered discussions are now producing systemic, multi-jurisdictional changes in European² and United States³ consumption tax regimes.

Inspiration came from the marketplace. Policy-makers observed widespread, business-initiated e-solutions to consumption tax compliance problems in a wide spectrum of jurisdiction. Although individually effective, when considered globally these options appeared piecemeal, and confusing. E-solutions frequently targeted single-issues, and were often jurisdiction-specific. Thus, it only made good sense for policy professionals to coordinate these advances, to harmonize e-solutions across multiple jurisdictions, and to make them more comprehensive within the jurisdictions that embraced them.

There are two aspects to these developments: horizontal – the availability of a single e-solution to the same consumption tax issue across many jurisdictions; and vertical – the availability of a comprehensive e-solution to multiple consumption tax issues within a single jurisdiction. Examples abound of e-registration, e-filing, e-

¹ The Digital VAT (D-VAT) was proposed to the President's Advisory Panel on Federal Tax Reform, and developed as part of the author's VAT course in the Graduate Tax Program at Boston University School of Law. Richard T. Ainsworth, *The Digital VAT: A Proposal for the President's Advisory Panel on Federal Tax Reform*, President's Advisory Panel on Federal Tax Reform (Apr. 30, 2005) at <http://comments.taxreformpanel.gov/> (and on file with the author).

² Council Directive of 20 December 2001 amending Directive 77/388/EEC with a view to simplifying, modernizing and harmonizing the conditions laid down for invoicing in respect of the value added tax. 2001/115/EC, 2002 O.J. (L 15) 24, available at http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_015/l_01520020117en00240028.pdf [hereinafter The Invoicing Directive] (standardizing the legal elements required on an invoice and authorizing fully digital invoicing). Council Directive of 7 May 2002 amending and amending temporarily Directive 77/388/EEC as regards the value added tax arrangements applicable to radio and television broadcasting services and certain electronically supplied services. 2002/38/EC, 2002 O.J. (L 128) 41 available at http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_128/l_12820020515en00410044.pdf [hereinafter The Digital Sales Directive] (permitting digital registration, notices, returns, as well as digital periodic and recapitulative statements in conjunction with establishing a fully digital regime for B2C sales of digital products by non-established businesses; *Sixth Directive* Article 26c).

³ 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). Walter Hellerstein, U.S. Subnational State Sales Tax Reform: The Streamlined Sales Tax Project at 8. Address before the International Tax Dialogue VAT Conference, Rome, Italy (Mar. 14-15, 2005) [hereinafter Hellerstein, *U.S. Subnational State Sales Tax Reform*] available at <http://www.itdweb.org/VATConference/Pages/Home.aspx> ("Throughout most of its 70-year history, there has never been a concerted movement to harmonize the US subnational sales tax on a multistate basis.")

payment, e-audit, e-refunds,⁴ at almost every tax jurisdictional level – national, state, district, city, or sub-city unit. Similarly, there are examples where a single company's e-filing or e-payment obligations in multiple jurisdictions are handled through a single e-solution.⁵

How should developing economies participate in this discussion? Should policymakers simply support incremental advances? Should the plan be to roll out vertical e-solutions at a pace roughly parallel to local technological development, or should comprehensive (horizontal and vertical) e-solutions be proposed for a dedicated

⁴ SSUTA, *supra* note 3, at § 401 (Requiring all member states to participate in an on-line registration program, other provisions require e-filing, and e-payment. The contract for the SSUTA on-line registration service has been awarded to a firm named Tax Watch: <http://www.watchsystems.com/>); Art. 26c(B)(2) of the *Sixth Council Directive 77/388/EEC* of May 17 1977, 1977 O.J. (L 145) 1, available at http://europa.eu.int/eur-lex/en/consleg/pdf/1977/en_1977L0388_do_001.pdf [hereinafter *Sixth Directive*] (requiring on-line registration in all E.U. countries under the special digital sales scheme, other provisions require e-filing, and e-payment). (New) Art. 22 (1)(a) as amended by Art. 28h of the *Sixth Directive*. (requiring all Member States to permit on-line registration). Switzerland has on-line VAT registration, available at http://www.estv.admin.ch/data/mwst/f/formulare/online/f_anmeld.html. Similarly, in Australia, available at: <http://ato.gov.au/onlineservices/content.asp?doc=/content/36109.htm&mnu=5611&mfp=001/010> Eleven states have mandatory e-filing and e-payment systems in place for some or all of their consumption taxpayers. In Alabama as of October 2003, all filing is required to be either electronic or by phone (<http://www.ador.state.al.us/salestax/EFileInfo.htm>). In Connecticut electronic filing is mandatory if annual liabilities exceed \$100,000. (<http://www.drs.state.ct.us/electronicervices/fastfiling.htm>). In Florida all zero returns must be filed electronically as well as the returns for filers who have in excess of \$30,000 in annual liability in the prior year. (<http://www.state.fl.us/dor/forms/dr15inst.html>). In Louisiana businesses with liabilities in excess of \$20,000 must pay by EFT. (<http://www.rev.state.la.us/sections/eservices/default.asp#efbt>). Minnesota has a mandatory electronic filing system for everyone. (http://www.taxes.state.mn.us/efiling/egs/sales_internet.html). Missouri has a mandatory e-filing system for all taxpayers who had in excess of \$15,000 in liability in 6 of the previous 12 months. (<http://www.dor.mo.gov/tax/business/payonline.htm>). New Jersey has a mandatory e-filing system for all taxpayers. (<http://www.state.nj.us/treasury/taxation/>). New York has a mandatory e-filing system, called Propfile, for taxpayers with liabilities in excess of \$500,000 annually. (http://www.tax.state.ny.us/prompt/Sales_Tax/sttoc00.htm). Oklahoma has a mandatory e-filing program for taxpayers with in excess of \$100,000 in liability per month. (<http://www.oktax.state.ok.us/oktax/quicktax.html>). In Texas electronic filing is mandatory for filers with a past year sales tax liability of \$100,000 or more. This filing must be through EDI if there are more than 30 Texas locations. (<http://www.window.state.tx.us/webfile/index.html>). Utah requires taxpayers with liabilities in excess of \$96,000 to e-file. (<http://www.tax.ex.state.ut.us/sales/salestaxonline.html>).

⁵ Texas is the classic example. It imposes a sales tax on sales of tangible personal property and specified taxable services. There are 1,270 sales tax jurisdictions in Texas, 124 county, 1,141 city, 104 districts in addition to the state tax. Rates may vary among the jurisdictions, but the tax base is harmonized.

All sales taxes are reported to and collected by one state-level agency, the Comptroller of Public Accounts (Tex. Tax Code Ann. §323.301). Taxpayers report these amounts on a single Texas sales tax return. The Comptroller of Public Accounts is authorized to allow or require any taxpayer to file electronically, based on a written agreement, and in a manner prescribed by regulation (34 Tex. Admin. Code § 3.9).

Prior to January 1, 2002 electronic payment was mandatory if payments in the previous year exceeded \$250,000, after January 1, 2002 the payments were mandatory if amounts exceeded \$100,000. Texas accepts funds transfers by EFT and EDI. Electronic filing of returns is mandatory in all instances where payments are required electronically (Tex. Tax Code Ann. §111.0625). Failure to comply with electronic filing and reporting rules is subject to penalty (Tex. Tax Code Ann. §111063).

segment of the economy? Which way would better stimulate development, encourage foreign direct investment, and more broadly integrate local businesses within world markets?

This article opts for the second approach and bases its answer on three factors: (a) revenue concentration – the fact that in developing countries the great bulk of VAT revenue is derived from a small number of large, frequently foreign business enterprises; (b) existing software – most, if not all, major multinational firms currently determine VAT obligations through global software applications integrated into their ERP system and encounter minimal tax-knowledge barriers when expanding in jurisdictions that align themselves with these applications; and (c) corporate governance reform – the fact that the C.E.O. and C.F.O. of global companies are under increased regulatory and shareholder pressures, often with direct personal liability, to document controls over cash flow in a manner that effectively mandates comprehensive automated consumption tax systems. These factors constitute context, opportunity and leverage for developing countries.

This article has two parts. Part 1 will develop the argument for a Digital VAT (D-VAT); Part 2 will present the D-VAT proposal. In essence this article suggests that the time is right for developing countries to consider adopting a comprehensive, fully digital VAT, (complete with certified software and trusted third party intermediaries who could assume all of the taxpayer's VAT responsibilities) within the limited group of enterprises encompassed by the large taxpayer group.

PART 1: THE ARGUMENT

Revenue Concentration – the Context

Although there is strong evidence supporting the proposition that in developing economies revenue is concentrated in a limited number of the largest firms, empirical evidence supporting the proposition that VAT revenues are similarly concentrated is mostly anecdotal and circumstantial.

Large taxpayer concentrations of VAT. Data collected by Ebrill, Keene, Bodin and Summers on the “distribution of turnover” from 17 developing countries⁶ leads them to conclude that “[i]t does appear to be an empirical regularity that value added is very strongly concentrated among a relatively few firms. Table 11.1 shows the distribution of turnover by size of firm for selected countries. Despite significant variation, a useful rule of thumb is that the largest 10% of all firms commonly account for 90% or more of all turnover.”⁷ Do the same 10% account for 90% of the VAT revenue?⁸

⁶ LIAM EBRILL, MICHAEL KEEN, JEAN-PAUL BODIN & VICTORIA SUMMERS, *THE MODERN VAT* 114 (2001) [hereinafter, EBRILL, *THE MODERN VAT*] (The 17 countries are: Albania, Bangladesh, Benin, Bulgaria, Burkina Faso, Cameroon, China, Croatia, El Salvador, Georgia, Mauritania, Mongolia, Pakistan, Philippines, Sri Lanka, Uganda and Vietnam.)

⁷ *Id.* at 117.

⁸ There is a good reason for focusing on turnover in these surveys. Katherine Baer's survey notes that turnover was, "... the most common factor for selecting large taxpayers ... generally the IMF recommends

Similar evidence and questions are raised by Katherine Baer's 2002 study. She records that, "[i]n France, for example, 15,000 enterprises (0.1% of the total) reported 55% of the total turnover, and 35% of the base for the corporate income tax."⁹ It is not clear if 55% of the turnover translates into 55% of the VAT. In the UK she notes that the large taxpayer group in HMC&E controlled 2,200 large VAT taxpayers. This was 0.1% of the total number of taxpayers, and the VAT involved was 22.2% of total direct and indirect revenue.¹⁰ Here it would be helpful to know if what percent of VAT revenues this amount represents.

Baer's study on large taxpayer units has some striking observations on revenue concentrations, but again she is looking at concentrations of total revenue. She concludes that on average, less than 1% of the taxpayers are responsible for over 50% of total revenue in developing countries.¹¹

This same lack of discrimination among revenue sources carries over to an IMF presentation in 2003,¹² and a World Bank paper in 2005.¹³ Both of these discussions support Baer's general conclusions, and do not further distinguish among the possible tax sources of the revenue concentrations.

In an earlier paper presented at a CIAT technical conference in 1994, Jaime Vazquez-Caro contended anecdotally that one of the reasons for establishing large taxpayer units was that (aside from being large taxpayers in their own right) these

that countries use annual sales, rather than quarterly or semi annual sales, as the principle criterion for identifying large taxpayers." KATHERINE BAER, IMPROVING LARGE TAXPAYERS' COMPLIANCE: A REVIEW OF COUNTRY EXPERIENCE, 15 & n.15 (IMF Occasional Paper No. 215, 2002) [hereinafter BAER, IMPROVING LARGE TAXPAYERS' COMPLIANCE].

⁹ *Id.* at 6, n.10.

¹⁰ *Id.* at 7, Table 1.2.

¹¹ BAER, IMPROVING LARGE TAXPAYERS' COMPLIANCE, *supra* note 7, at 7, & Table 1.2.

Concentration of Tax Collection in Selected Countries for 1999 (7 of 34 in full table)

	Number of large taxpayers	% of total	% of revenue	Details provided in Baer at Page:
Argentina	3,665	0.1	49.1	32-33
Benin	812	1.0	90.0	28-29
Bulgaria	842	0.1	51.4	25
Hungary	369	0.1	42.1	25
Kenya	600	0.4	61.0	29-30
Peru	2,450	0.9	64.9	35
Philippines	833	0.2	36.0	31-32

¹² Jean-Paul Bodin, *LTU Case Studies*, power point slide 11 (Harvard International Tax Program, 2003) (on file with author).

¹³ William McCarten, *The Role of Organizational Design in the Revenue Strategies of Developing Countries: Benchmarking with VAT Performance*, 14, paper presented at the International Tax Dialogue Conference, Rome Italy (Mar. 15-16, 2005) available at <http://www.itdweb.org/VATConference/Pages/Home.aspx>

enterprises were “large collectors of withholding and VAT.”¹⁴ Carlos Silvani has indicated that based on his experience, one “... would be very safe assuming that the VAT concentration [within the large taxpayer groups] is at least as important as it is for total revenue.”¹⁵

Border concentrations of VAT. There is however, good empirical evidence that VAT receipts in developing countries is concentrated in another respect: at the borders. Ebrill, Keene, Bodin and Summers find border VAT collection to be, “... a key empirical feature of the VAT: revenues collected on imports commonly accounts for a large portion of total VAT revenues.” In a sample of 22 developing and transitional economies it is clear that, “in about two-thirds of them, more than half of all VAT revenue is collected on imports: the average is 55%.”¹⁶

If the largest importers in a developing country are also the largest taxpayers, and the largest sources of VAT, then it would seem more than appropriate to encourage these taxpayers to satisfy their VAT obligations digitally. As Luc de Wulf and Gerald McLinder have demonstrated,¹⁷ customs administration is one of the most easily automated revenue sources for developing countries. For this reason product and user codes in the D-VAT need to be harmonized, if not identical with customs codes. An automated interface between customs and the D-VAT needs to be assured, and if possible customs software should be certified in a package with the D-VAT.

Existing Software – the Opportunity

The availability of software packages that effectively determine the full range of global consumption tax obligations has been a recognized fact of business life for over a decade. These packages automatically identify taxable transactions, make an accurate calculation of tax, and provide for the automated production of returns, or electronic filing. Tax payments, electronic refunds, and tax audits can all be carried out electronically.

These software solutions have been a topic of continued interest in the O.E.C.D. The 1998 Ottawa Ministerial Conference initiated a public discussion of issues in e-commerce with the *Taxation Framework Conditions*.¹⁸ The Ottawa Conference was

¹⁴ Jaime Vazquez-Caro, *Assessing the Impact of Integrating Functions of Tax Administration on Efficiency and Effectiveness*, CIAT (1994), as referenced in *Id.* at 27.

¹⁵ Carlos Silvani, personal e-mail communication (June 2, 2005) (on file with author).

¹⁶ EBRILL, *THE MODERN VAT*, *supra* note 6, at 117.

¹⁷ Luc de Wulf and Gerald McLinder, *The Role of Information Technology in Customs Modernization* in *CUSTOMS MODERNIZATION HANDBOOK*, eds. Luc de Wulf and Jose B. Sokel (2005) [hereinafter de Wulf & McLinder, *Information Technology in Customs*]. (Providing a comprehensive survey of recent ICT applications applied to customs clearance. Concluding that it is now feasible and cost effective for even the poorest countries to employ proven off-the-self ICT applications.)

¹⁸ *Electronic Commerce: Taxation Framework Conditions*, O.E.C.D. 5 (Oct. 8, 1998) available at <http://www.oecd.org>. (The Framework established consumption tax framework principles that: (a) taxation should be in the place of consumption, (b) digital goods should be taxed as services, (c) imported services and intangible products should be reverse charged, and (e) cooperative systems be put in place to collect taxes. In tax administration the Framework established principles (a) to develop electronic signature IDs,

followed by a series of reports that broadly examined tax law applications and the administrative impact of digital technology.¹⁹ Throughout its work the O.E.C.D.'s primary concern has been with the cross-border aspects of digital commerce; the horizontal aspect. Businesses pressed strongly,²⁰ and the O.E.C.D. conceded early, that globally effective e-solutions to consumption tax problems were already in place, and that these solutions, in aggregate, contained the elements of a fully digital compliance model.²¹ Participation in global commerce was and is synonymous with participation in e-commerce and e-tax compliance.

During the opening months of 2005 the O.E.C.D. issued further reports. This time they focused on the use of certified intermediaries for determining, reporting and remitting cross-border consumption taxes. The O.E.C.D. expressly anticipates the "emergence of global intermediaries" and is proposing standards for their certification in consumption tax matters.²² Guidance Notes are available on the proper structure, format, and application of an e-tax audit file,²³ as well as on the evaluation of tax accounting

(b) to reach international agreement on accepting digital signatures, and (c) to develop internationally compatible information requirements for record retention, record format, access to third party database arrangements, and agreed periods for record retention.)

¹⁹ *Report by the Consumption Tax Technical Advisory Group (TAG)*, OECD (Dec. 2000) [hereinafter *Consumption TAG*, O.E.C.D.] available at <http://www.oecd.org> (considering place of consumption, tax collection options, consumption tax barriers to e-commerce development, and a simplified interim approach). *Report by the Technology Technical Advisory Group (TAG)*, O.E.C.D. (Dec. 2000) [hereinafter *Technology TAG*, O.E.C.D.] available at <http://www.oecd.org> (considering the technological implications of various e-commerce collection models, and making recommendations for further research). *Consumption Tax Aspects of Electronic Commerce: A Report from Working Party No. 9 on Consumption Taxes to the Committee on Fiscal Affairs*, O.E.C.D. (Feb. 2001) [hereinafter *Working Party No. 9*, O.E.C.D.] available at <http://www.oecd.org>. (assessing and consolidating the work of the TAGs completed the previous year). *Implementation of the Ottawa Taxation Framework Conditions*, O.E.C.D. (2003) hereinafter *Implementation (2003)*, O.E.C.D.] available at <http://www.oecd.org> (assessing progress since Ottawa and setting out the research goals in third party providers, certified software, audit interface for remote enforcement in consumption taxes). Directorate for Financial, Fiscal and Enterprise Affairs, Committee on Fiscal Affairs, O.E.C.D. *Report on Automating Consumption Tax Collection Mechanisms*, (DAFFE/CFA(2003)43/ANN5) (July 1-2, 2003) [hereinafter *Automating Consumption Tax Collection*, O.E.C.D.] available at <http://www.oecd.org>.

²⁰ *Consumption TAG*, O.E.C.D. *supra* note 19, at 8 (discussing how "business members feel strongly the simpler the solution, the greater the level of compliance would be and that future requirements should leverage the developments of commercial business models.")

²¹ *Technology TAG*, O.E.C.D. *supra* note 18, at 14-90 (considering collection models, jurisdiction verification systems, party identification and classification systems, credit card applications, registration systems, the tax at source and transfer model, trusted third party models, hybrid tax and transfer and clearinghouse models, electronic payments, electronic invoicing, electronic remittance and reporting, electronic record integrity systems and electronic database solutions.)

²² *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 [hereinafter *Facilitating Collection of Consumption Taxes*, O.E.C.D.] available at <http://www.oecd.org> ("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 ...").

²³ *Guidance Note: Guidance for the Standard Audit File – Tax*, O.E.C.D. (May, 2005) available at <http://www.oecd.org> [hereinafter *Guidance Note: Audit File*, O.E.C.D.].

software.²⁴ These studies and recommendations directly and expressly impact corporate governance reforms.

There is more than theoretical discussion on the horizon. Two multi-jurisdictional experiments in consumption tax e-solutions are underway that are testing O.E.C.D. principles: the One-Stop-Shop movement in the E.U., and the Streamlined Sales and Use Tax Agreement (SSUTA) in the U.S. Both efforts aim at providing businesses with comprehensive solutions to consumption tax obligations across multiple jurisdictions.

These experiments contain the critical elements of the D-VAT. They will be separately considered. There are two major differences between them: (1) the US experiment utilizes third parties as administrative and financial intermediaries (certified service providers) whereas the EU experiment places the Treasury of Member States in this intermediary function;²⁵ and (2) the US experiment is broadly applicable to all businesses in a jurisdiction, whereas the EU experiment isolates particular business in a segment of the economy for special treatment, and excludes other businesses similarly situated. Participation is voluntary under both experiments.

The E.U.'s One-Stop-Shop of Article 26c.

Article 26c was added to the *Sixth Directive* following up on the “Lisbon Strategy.”²⁶ This is a stated effort to make the E.U. a more competitive, dynamic knowledge-based economy, with improved employment and social cohesion by 2010.²⁷

The problem. Article 26c addresses one isolated aspect of digital commerce, the sale of digital products to non-taxable E.U. customers by non-E.U. businesses. The technical issue is sourcing. The old *Sixth Directive* sourced these supplies outside the

²⁴ *Guidance Note: Guidance on Tax Compliance for Business and Accounting Software*, O.E.C.D. (May 2005) available at <http://www.oecd.org> [hereinafter *Guidance Note: Accounting Software*, O.E.C.D.]

²⁵ When the European Commission proposed an expansion of the E.U. experiment, the expansion of the Article 26c one-stop-shop to include B2B sales in October 2004 (COM(2004) 728 final available at http://europa.eu.int/comm/taxation_customs/publications/official_doc/COM_728_en.pdf), the Commission pulled back from one their experiment in one important respect: the single e-payment provision that was facilitated by the Member States under the original version of the experiment. The reason for the pull-back was the burdens of “... dealing with the re-distribution of money received [which would require] ... [d]eveloping the kind of major treasury function needed to handle the volume of money flows which would be inherent to a much wider application...” (COM(2004) 728 final, page 5).

The Commission went on to say, “It is however probable that financial intermediaries or other trusted third party service providers might offer a payment handling function to operators under this scheme which would relieve them from the burden of multiple payments. Such a commercial service would be particularly attractive to smaller operators but would have to be based on commercial realities.” (COM(2004) 728 final, page 5).

²⁶ The name derives from broad e-commerce policy objectives set out at the Lisbon European Council of March 24 and 24, 2000. The objectives are set out in: *eEurope - An Information Society for all*, (COM/2000/0130 final) available at <http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:52000DC0130:EN:HTML>

²⁷ 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, available at http://ue.eu.int/ueDocs/cms_Data/docs/pressdata/en/misc/71099.pdf

E.U., making them not subject to VAT. Consumption (use and enjoyment) however, was occurring within the E.U. and this distorted competition between E.U. and non-E.U. businesses.²⁸

The solution worked out by the Commission had technical and practical aspects. On the technical side, as of May 7, 2002 all electronically supplied services from non-E.U. businesses were listed within the exceptions of Article 9(2)(e). A special rule dealing with similar B2C transactions was added in Article 9(2)(f). Thus, VAT now became due on these sales, because the source of these supplies had moved within the E.U.

The practical aspect of this solution was more complicated. B2B transactions from non-E.U. suppliers, by far the largest part of e-commerce in monetary terms, were handled rather simply through a reverse charge.²⁹ B2C transactions were more difficult. Because consumers do not file VAT returns a reverse charge was not possible. The only solution for B2C sales from non-E.U. businesses was to require the non-E.U. business to collect and remit the tax.

The existing solutions. For those businesses willing to comply there were essentially two options. They could either (1) establish themselves in a Member State,³⁰ or (2) register in each Member State where they made taxable supplies.³¹ Neither option was optimal. Although under the first option all digital sales would be sourced to one E.U. jurisdiction, the place where the business was established (Article 9(1)) could now impose direct tax obligations. Formerly non-E.U. businesses now became real E.U. businesses for tax and regulatory purposes. VAT was determined at origin. The second option also had disadvantages. Under this option a business could conceivably be required to register in 25 Member States, file 25 sets of VAT returns, and do so in as many as 20 different languages. VAT was determined at destination.

The digital solution. Article 26c was adopted to provide a third alternative, a one-stop-digital-shop option. It allowed non-E.U. established businesses to select a single “Member State of identification” where they could be registered, but not be established, under a simplified arrangement. VAT from sales made throughout the E.U. would be determined on a destination-basis using the rates and rules of the jurisdiction where the customer resided. However the VAT collected on these sales would be paid over to the

²⁸ Specifically, the sourcing issue was that the fall back sourcing rule provided that any service not covered in the series of exceptions that make up the rest of Article 9 was to be taxed where the supplier was located. Thus, putting the place of supply in the US for many digital sales by US companies into the EU. *Sixth Directive, supra* note 4, at Art. 9(1).

²⁹ *Id.* at Art. 21. (A reverse charge is a self-assessment obligation imposed on businesses purchasing taxable supplies.)

³⁰ *Id.* at Art. 9(1). (In this instance the place of supply of digital services would be the Member State where the supplier is established. However, it would subject the business to direct taxation in that state.)

³¹ *Id.* at Art. 21. (In this instance the place of supply of digital services would be where the customer resides (*Id.* at Art. 9(2)(f)). This is a circumstance that might require registration and the filing of returns in as many as 25 States.)

Member State of identification on a single electronic return, and the Treasury of that Member State would then reallocate the funds remitted.

Importantly, Article 26c requires all communication between the taxpayer and the Member State to be electronic.³² Registration and all notifications about changes in status,³³ statements and recapitulative statements,³⁴ filing of returns,³⁵ payments of VAT amounts due and collected,³⁶ and even communications by the Member State to the non-established taxpayer,³⁷ must be in electronic form. Article 26c therefore presents in microcosm a fully functional D-VAT. If elected by the taxpayer, Member States are required to accept and engage completely, in all aspects of this digital VAT relationship.³⁸

The U.S. Streamlined Sales and Use Tax Agreement

The Streamlined Sales and Use Tax Agreement (SSUTA)³⁹ is a broad effort by the States to harmonize tax bases, standardize electronic reporting requirements, restrict jurisdictional reporting for local jurisdictions to the state level, and streamline the collection of state and local consumption taxes. There are clearly two aspects to SSUTA, the effort to harmonization and standardize laws, and the effort to establish a digitized compliance regime.

The SSUTA was adopted on November 12, 2002, but has yet to take effect. A threshold requirement to operationalize the Agreement has not been met. The Agreement must be enacted in 10 or more states that represent at least 20% of the US population. Expectations are that this threshold will be exceeded this year.

³² *Id.* at Art. 26c(B)(1).

³³ *Id.* at Art. 26c(B)(2). (“The non-established person shall state to the Member State of identification when his activity as a taxable person commences, ceases or changes to the extent that he no longer qualifies for the special scheme. Such a statement shall be made electronically.”)

³⁴ *Id.* at Art. 26c(B)(9). (“The non-established taxable person shall keep records of the transactions covered by this special scheme in sufficient detail to enable the tax administration of the Member State of consumption to determine that the value added tax return referred to in (5) is correct. These records should be made available electronically on request to the Member State of identification and the Member State of consumption.”)

³⁵ *Id.* at Art. 26c(B)(5). (“The non-established taxable person shall submit by electronic means to the Member State of identification a value added tax return for each calendar quarter ...”)

³⁶ *Id.* at Art. 26c(B)(7). (“The non-established taxable person shall pay the value-added tax when submitting the return. Payment shall be made to the bank account denominated in Euro, designated by the Member State of identification.”)

³⁷ *Id.* at Art. 26c(B)(3)(second paragraph). (For example, even the notification of registration, and allocation of taxpayer identification number is required to be electronic. “The Member State of identification shall notify the non-established taxable person by electronic means of the identification number allocated to him.”)

³⁸ Proposal for a Council Directive Amending Directive 77/388/EEC as regards the rules governing the right to value added tax, COM(1998) 377 final. 1998 O.J. (C 219)16, available at http://europa.eu.int/eur-lex/pri/en/oj/dat/1998/c_219/c_21919980715en00160019.pdf (Commission proposal for a similar digital scheme, without provision for a single payment of EU-wide VAT obligations, but with a single return and filing obligations under Article 22b.)

³⁹ SSUTA, *supra* note 3.

Harmonization of consumption tax laws and mandated one-stop-shops under SSUTA. The SSUTA differs from the E.U. effort under Article 26c both in size and complexity. The U.S. has 7,588⁴⁰ discrete consumption tax jurisdictions many imposing tax on non-harmonized bases, with non-uniform rates, and a mix of destination and origin based systems. The need for state level one-stop-shop solutions at the state level has always been recognized, and they have proliferated in paper and digital form.

These kinds of multi-jurisdictional one-stop-shops have been in effect in the U.S. since the 1950's. In 34 of the 45 states that impose a state level RST, the local jurisdictions (counties, districts, and cities) impose an RST of their own.⁴¹ Variances are common not only among the states, but among local jurisdictions within the same state, as well as between the local jurisdictions and the state itself. In 25 of these 34 states⁴² a one-stop-shop operates to collect the consumption taxes for all local jurisdictions. In 5 states⁴³ there is a combined system where a one-stop-shop is in use for some jurisdictions, while other jurisdictions have autonomous local collection. A wide variety of digital compliance options are available among the states and they are applicable to one-stop-shops.⁴⁴

The SSUTA changes this by requiring centralized, state level, reporting of all local taxes for all local jurisdictions.⁴⁵ Thus, it effectively mandates one-stop-shop filing of local returns for participating states. Although central filing of local returns is already

⁴⁰ This figure is based on a recent count with the best available information, and represents 46 state level jurisdictions (including Washington, D.C.), 1,732 counties, 5,571 cities, and 229 districts. At one extreme is Texas with 1,370 taxing jurisdictions (124 counties, 1,141 cities, and 104 districts in addition to the state itself), and at the other extreme are states like Connecticut, Hawaii, and Maine where there is only one taxing jurisdiction at the state level.

⁴¹ In the 9 other states (Connecticut, Hawaii, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, Mississippi, New Jersey, Rhode Island, and West Virginia, as well as the District of Columbia) there is only a state level RST, and no need for a one-stop-shop. There are some limited exceptions to this rule. In these cases no one-stop-shop functions to facilitate compliance. Some counties in Indiana are authorized to levy miscellaneous local taxes on specified transactions. *Illinois Code* 6-9-34-1. In Mississippi even though general sale taxes at the local level are not permitted, some counties and cities are permitted to impose hotel-motel occupancy and taxes on restaurant sales. *Miss. Code Ann.* § 27-65-73. In New Jersey only Atlantic City imposes a local levy on specific types of retail sales. *New Jersey Statutes Annotated*, Section 40:48-8.15. In Rhode Island an additional 1% levy is added to meals and beverage sales for local use. *General Laws of Rhode Island*, Section 44-18-19.1. Effective on July 1, 2005 a general sales and use tax may be imposed by municipalities in West Virginia. *West Virginia Code*, Section 8-13C-6.

⁴² The 25 states are: Arkansas, California, Florida, Georgia, Illinois, Iowa, Kansas, Missouri, Nebraska, Nevada, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, and Wyoming.

⁴³ The 5 states are: Alabama, Arizona, Colorado, Minnesota, and Wisconsin.

⁴⁴ At the present time the three main electronic solutions are: extensible markup language – XML, electronic data interchange – EDI, and Internet based. The State of California currently offers sales and use tax filing over the web using XML (<http://www.boe.ca.gov/electsrv/efiling/srvprovider.htm>). The states of Florida (<http://www.state.fl.us/dor/forms/dr15inst.html>) and South Carolina (<http://www.sctax.org/Electronic+Services/default.htm>) use EDI. The state of Kansas uses internet based file transfer protocol (FTP) (<http://www.ksrevenue.org/rcuwebfile.htm>).

⁴⁵ SSUTA, *supra* note 3, at §§ 318(A); 318(B)

practiced in many states,⁴⁶ there are states where multiple returns need to be filed within a single state,⁴⁷ as well as states where local government can “opt out” of a state sponsored centralized filing system.⁴⁸ These variances would no longer be permitted.

Digital intermediaries: Certification of service providers and software solutions. SSUTA differs from Article 26c because it achieves digital interstate coordination of consumption taxes without using a government agency for the administration, collection and re-allocation of revenues. It provides a centralized, multi-state electronic registration system for businesses to establish their business registration profile.⁴⁹ It requires uniform reporting for all states using standard data elements for uniform reports and uniform requirements for payments,⁵⁰ and it provides a standardized system for refunds, both for end consumers, and for the businesses remitting the tax.⁵¹ However, the most innovative aspects of SSUTA are the provisions for certifying service providers and software.

*The Certification of Service Providers (CSP).*⁵² SSUTA provides for certification of tax service providers (CSPs)⁵³ who will provide point of sale, automated tax determination systems. CSPs will also file returns and make tax payments for taxpayers.⁵⁴ In this respect CSPs will function as private sector multi-jurisdictional one-stop-shop. The CSP is an intermediary between government and business, and facilitates the administration, collection and payment of the consumption tax.⁵⁵

Additionally, use of a third-party CSP comes at no cost to the seller,⁵⁶ and will insulate the seller from liability for errors in the determination or remission of the tax, except for cases of fraud or misrepresentation.⁵⁷ There is a clear expectation of

⁴⁶ California, Illinois, Texas, New Mexico, and South Dakota.

⁴⁷ Colorado.

⁴⁸ Florida.

⁴⁹ SSUTA, *supra* note 3, at §§ 303; 401(A); 401(C); 404.

⁵⁰ SSUTA, *supra* note 3, at § 318(D)

⁵¹ SSUTA, *supra* note 3, at § 325

⁵² In 2001 four states (Kansas, Michigan, North Carolina, and Wisconsin) participated in a pilot project to test the CSP concept. Three firms applied to participate as CSP's, (Taxware International, Pitney-Bowes/Vertex, and esalestax), two were certified as CSPs, (Taxware International, Pitney-Bowes/Vertex). The pilot project was successful in establishing the viability of the CSP concept. The Streamlined Sales Tax Project web site indicates: “The pilot project established that the use of a third-party provider was viable. Systems and procedures were established that resulted in the actual collection and remittance of sales and use tax by a vendor on behalf of a retailer. Knowledge and experience was obtained by the participating states and vendors.” <http://www.streamlinedsalestax.org>

⁵³ SSUTA, *supra* note 3, at § 203 (A CSP is “[a]n agent certified under the Agreement to perform all of the seller's sales and use tax functions, other than the seller's obligation to remit tax on its own purchases.”)

⁵⁴ SSUTA, *supra* note 3, at §§ 501(A), (B), (C) and (D).

⁵⁵ The SSTEP envisions three automation models, (1) the CSP, (2) the certified automated system (CAS) which is software certified under the Agreement that is used by the taxpayer directly, without the intermediation of the CSP, and (3) certified proprietary systems for large taxpayers who have developed software of their own. SSUTA, *supra* note 3, at §§ 203; 404(A); 202; 403(B); 207; 403(C).

⁵⁶ The seller will lose the value of the “float” on monies drawn from the seller's account by the CSP to pay the government. The interest earned between the time of this withdrawal and the due date of the payment to the government.

⁵⁷ Uniform Sales and Use Tax Administration Act (as approved on Dec. 22, 200, and as amended on Jan. 22, 2001) § 9(a) [hereinafter USUTA] (“A seller that contracts with a Certified Service Provider is not

cooperation between the taxation authorities and the CSP in terms of providing accurate and timely information about changes in rates or other critical tax determination elements.⁵⁸ CSP's are expressly relieved of liability from having charged and collected an incorrect amount of tax, if the error was due to erroneous data provided by the state.⁵⁹

Certification of software solutions. The SSUTA also provides two alternate systems, the Certified Automated System (CAS),⁶⁰ and the Certified Proprietary System (CPS).⁶¹ These alternatives allow for the certifications of automated systems that are kept in-house.⁶² In these cases the relief from liability is dependent on the taxpayer properly using the certified system.⁶³ Questions about liability allocation among all these systems (CSP, CAS and CPS) remain, and as with all yet-to-be-implemented legislation are at best a "work-in-progress" until they become operational in the States.⁶⁴

Corporate Governance Reform – the Leverage

Corporate governance, particularly governance practices at the largest multinational corporations, is undergoing reform – transparency, good business practice and investor protection are the keys to this process. There are at least three major catalysts of change – the natural efficiencies of the marketplace, widespread investor outrage at recent accounting failures, and a broad recognition of regulatory inadequacy. Each is a pressure urging corporate governance reform, and are having a direct impact on automated tax compliance by these companies.

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 that 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 Uniform Sales and Use Tax Administration Act (USUTA) is the “enabling” legislation that authorizes a State’s participation in the SSUTA.

⁵⁸ SSUTA, *supra* note 3, at § 328 (The states have an obligation to provide a taxability matrix of rate and product or service taxability in a downloadable format. CSPs and sellers are relieved of liability for collecting the wrong amount of tax if they relied on erroneous data provided in the matrix.) SSUTA § 304 (State rate or base changes will only be effective on the first day of a calendar quarter, and are obligated to provide as much advance notice of changes as possible.)

⁵⁹ SSUTA, *supra* note 3, at § 306.

⁶⁰ *Id.* at § 203. A Certified Automated System (CAS) is defined as a “[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.”

⁶¹ *Id.* at § 207. A Certified Proprietary System (CPS) is defined as the 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.”

⁶² SSUTA, *supra* note 3, at §§ 501 (C) and (D).

⁶³ USUTA, *supra* note 57, at §§ 9(b) and (c) (for CAS and CPS respectively).

⁶⁴ Stephen Moore, *An Uneasy Marriage: Sellers and Certified Service Providers*, 21 J. STATE TAX’N 65, 72 (2003). (“The relationship [between sellers and service providers] is inherently adversarial and each party needs to develop audit strategies for protecting itself from the other party in what may prove to be an unhappy marriage for these partners in commerce. ... Can CSPs audit sellers to determine whether there is probable cause to believe that a seller has committed fraud or made a material misrepresentation?” Moore asks what would happen if a seller simply provides faulty information to the CSP without, rising to the level of misrepresentation or fraud, but there tax collection was short nevertheless?)

Can developing countries find leverage in these pressures for reform? Can they apply this leverage and utilize the opportunities presented by “e-solutions” to VAT compliance to maximize revenue from the large taxpayer group?

Natural efficiencies of the marketplace. In recent years there has been considerable academic discussion about a global convergence of corporate governance. Scholars have postulated a natural globalization processes with business efficiencies and cultural dispositions bringing corporate governance practices into global harmony.⁶⁵ Such a convergence would significantly impact investment decisions and economic development. The regulatory oversight of multinational enterprises could be streamlined, financial systems would be simplified, and global investment would be facilitated. No academic however, contended that “natural convergence” would come quickly.

Investor outrage at accounting failures. The second catalyst of change – investor outrage – has demanded immediate action. The outrage has been global, because financial failure has been global. A partial list of the failures would start in Australia with the collapse of HIH (March, 2001)⁶⁶ and One.Tel (July, 2001),⁶⁷ followed quickly by the bankruptcy of Enron (October, 2001),⁶⁸ and WorldCom (June, 2002)⁶⁹ in the US. In the EU scandals arose at Vivendi (July 2002) in France, then at Ahold (February,

⁶⁵Lucian A. Bebchuk and Mark. J. Roe, *A Theory of Path Dependence in Corporate Ownership and Governance*, 52 STAN. L. REV. 127 (1999) (developing the theory of path dependencies in the context of corporate governance). See also A. N. Licht, *The Mother of All Path Dependencies Toward a Cross-Cultural Theory of Corporate Governance Systems*, 26 DEL. J. CORP. L. 147 (2001); L. E. Ribstein, *Politics, Adaptation and Change*, 8 AUST. J. CORP. L. 246 (2001); R. Romano, *A Cautionary Note on Drawing Lessons from Comparative Corporate Law*, 102 YALE L. J. 2021 (1993). But see Paul von Nessen, *Corporate Governance in Australia: Converging with International Norms*, 15 AUST J. CORP. L. 1, 47, n. 73 (2003) citing further to P.G. Maloney, *The Common Law and Economic Growth: Hayek Might Be Right*, 30 J. LEG. STUD. 503 (2001) (postulating that this convergence “coincide[s] with the civil/common law divide.”

⁶⁶ JUSTICE NEVILLE OWEN, HIH ROYAL COMMISSION, FAILURE OF HIH: A CORPORATE COLLAPSE AND ITS LESSONS: A REPORT OF THE HIH ROYAL COMMISSION, (April 4, 2003) available at <http://www.hihroyalcom.gov.au/finalreport/> (HIH was the largest general insurance company in Australia. Accounting entries hid claims that exceeded accounting reserves, forcing the company’s liquidation.) M. De Martinis, *Do directors, regulators, and auditors speak, hear and see no evil? Evidence from the Enron, HIH and One.Tel collapses*, 15 AUST. J. CORP. L. 66 (2003).

⁶⁷ Gerald Acquah-Gaisie, *Toward More Effective Corporate Governance Mechanisms*, 18 AUST. J. CORP. L. 1 (2005). (Discussion of One.Tel and the lessons learned. One.Tel was one of Australia’s largest telecommunications companies. One.Tel paid high performance bonuses to the directors as the company was on the verge of collapsing. That internal incentives could have rewarded directors of a failing company outraged Australians and accelerated reform efforts there.)

⁶⁸ Enron was the seventh largest company in the US. Sham transactions involving Caymen Island entities improperly inflated asset values. See: Peter Behr and April Witt, *Visionary’s Dream Led to Risky Business: Opaque Deals, Accounting Sleight of Hand Built an Energy Giant and Ensured Its Demise*, Washington Post, July 28, 2002, at A-1.

⁶⁹ WorldCom was the second-largest long distance carrier in the US. Expenses for client development were books as assets. See: Carrie Johnson and Ben White, *WorldCom Arrests Made: Two Former Executives Charged with Hiding Expenses*, Washington Post, August 2, 2002, at A-1.

2003)⁷⁰ in the Netherlands, and finally at the Italian dairy giant Parmalat (February, 2003).⁷¹

In each case, the failures were caused by accounting irregularities; irregularities that should have been, but were not, reported to shareholders by the statutory auditors. The further fact that the irregularities were in many cases the result of tax shelters promoted by the very same auditors, who were obligated to cautioned shareholders about the risks involved, compounded the problems and heightened the demand for corporate governance reform.⁷²

Only in Japan, among the major industrial countries undergoing corporate governance reform in the 2000-2005 time frame, was the reform itself not preceded by a serious domestic financial scandal.

Recognition of regulatory inadequacy. The fact that these collapses occurred in both of the major regulatory systems points to the third catalyst for change – widespread recognition that the regulatory systems put in place to assure economic stability were not working. The two dominant regulatory methods are known in shorthand as principles-based and rules-based standard setting systems. For years there have been differences between the major rules-based system (U.S. Generally Accepted Accounting Principles) and the dominant principles-based system widely preferred in the E.U. and elsewhere (International Accounting Standards). There is considerable evidence that recent events

⁷⁰ *Ahold Reveals e170m in Legal Bill in Year-end Results*, THE LAWYER 5 (Apr. 26, 2004) (Ahold's earnings were overstated due to improper booking of supplier discounts.)

⁷¹ James E. Rogers, *Comment: Going Too Far Is Worse Than Not Going Far Enough: Principle-Based Accounting Standards, International Harmonization, and the European Paradox*, 27 HOUS. J. INT'L L. 429 (2005) (indicating that the Parmalat case involved \$3.5 billion in false assets recorded in Cayman Island subsidiaries.)

⁷² U.S. GOVERNMENT ACCOUNTING OFFICE, TAX SHELTERS: SERVICES PROVIDED BY EXTERNAL AUDITORS: A GAO UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE REPORT TO THE RANKING MINORITY MEMBER, PERMANENT SUBCOMMITTEE ON INVESTIGATIONS, COMMITTEE ON HOMELAND SECURITY AND GOVERNMENT AFFAIRS, U.S. SENATE [hereinafter GAO: TAX SHELTERS] (February, 2005) (GAO-05-171) available at <http://www.gao.gov/docsearch/repanctest.html> (A comprehensive examination of the role of the statutory auditor in providing tax shelters for audit clients. In the Executive Summary the GOA reported that, "...61 Fortune 500 companies obtained tax shelter services from their external auditors during 1998 through 2002 for transactions generally reportable on tax returns sent to the IRS. ...Estimated potential revenue loss to the federal government from the 61 companies' auditor-related transactions was about \$3.4 billion [about \$1.8 billion in categories the IRS considered abusive.]); JOINT COMMITTEE ON TAXATION, REPORT OF INVESTIGATION OF ENRON CORPORATION AND RELATED ENTITIES REGARDING FEDERAL TAX AND COMPENSATION ISSUES, AND POLICY RECOMMENDATIONS (JCS-3-03) 3 Vols., available at <http://www.house.gov/jct/pubs03.html> (a comprehensive examination of the tax and accounting related issues in Enron); U.S. SENATE PERMANENT SUBCOMMITTEE ON INVESTIGATIONS & COMMITTEE ON HOMELAND SECURITY AND GOVERNMENT AFFAIRS, THE ROLE OF PROFESSIONAL FIRMS IN THE U.S. TAX SHELTER INDUSTRY (February 8, 2005). (Urging the PCAOB to "... strengthen and finalize proposed rules restricting certain accounting firms from providing aggressive tax services to their audit clients, charging companies a contingent fee for providing tax services, and using aggressive marketing efforts to promote generic tax products to potential clients.") Available at http://www.quatloos.com/Tax_Shelter_Industry_Firms.pdf

have encouraged the U.S. and E.U. to finally move closer to one another and harmonize corporate regulation.⁷³

In the U.S. the Sarbanes-Oxley Act of 2002⁷⁴ mandated sweeping reforms in the public company financial reporting process. Similar legislation has been enacted in France,⁷⁵ U.K.,⁷⁶ Australia⁷⁷ and Japan.⁷⁸ Additional legislation will be required in each

⁷³ SECURITY AND EXCHANGE COMMISSION, STUDY PURSUANT TO SECTION 108(d) OF THE SARBANES-OXLEY ACT OF 2002 ON THE ADOPTION BY THE UNITED STATES FINANCIAL REPORTING SYSTEM OF A PRINCIPLES-BASED ACCOUNTING SYSTEM, [hereinafter SEC: STUDY PURSUANT TO SECTION 108(d)] available at <http://www.sec.gov/news/studies/principlesbasedstand.htm> (Congress mandated that the SEC consider moving to a principles-based system of regulation. The study concludes that flaws in both methods encourage the development of a middle-ground termed an “objectives-oriented” standard. The SEC and PCAOB are now attempting to draft accounting and security rules in this manner.)

⁷⁴ Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (2002) (codified in scattered sections of 11, 15, 18, 28, and 29 U.S.C.) [hereinafter *Sarbanes-Oxley Act*] available at <http://www.law.uc.edu/CCL/Soact/soact.pfd>

⁷⁵ The *Loi de Sécurité Financière* is published in the Official French Journal, Aug. 2, 2003 [in French] at <http://www.legifrance.gouv.fr/Waspad/UnTexteDeJorf?numjo=ECO200186L>.

⁷⁶ Direct oversight of U.K. auditors is delegated to professional associations. (See: REPORT TO THE SECRETARY OF STATE FOR TRADE AND INDUSTRY, REVIEW OF THE REGULATORY REGIME OF THE ACCOUNTANCY PROFESSION (January 2003) URN 03/589, available at <http://www.dti.gov.uk>). The legislative response to Enron in the U.K. was the Companies (Audit, Investigations and Community Enterprise) Act of 2004 (COMPANIES (AUDIT, INVESTIGATIONS AND COMMUNITY ENTERPRISE) ACT, 2004, ch., 27 available at <http://www.opsi.gov.uk/acts/acts2004/20040027.htm> [hereinafter *Companies Act*]). As of October 1, 2005 companies will also be required to make detailed disclosures of audit and non-audit services provided by auditors. (*Companies Act*, *supra* page 9, note 2, at §21-24). Thus in many respects, the U. K. rules are similar to the U. S. rules under Sarbanes-Oxley. Both U. K. and U. S. rules require company directors or CEOs to sign off on audits; both allow authorities to require foreign subsidiaries to comply with their provisions; and both created semiprivate organizations to monitor compliance with the regulations. For the U.S. the PCAOB, and in the U. K. the FRRP is designated to monitor the law. Unlike the PCAOB, the FRRP has no authority to punish companies that issue faulty reports.

⁷⁷ Australia began a comprehensive corporate law economic reform program in 1997 (the CLERP initiative). The ninth package of reforms in this initiative took up the issue of auditor independence, *Corporate Disclosure: Strengthening the Financial Reporting Framework*, is referred to as CLERP 9. CLERP 9 is based on proposals for change from three sources: (1) the Ramsay report *Independence of Australian Company Auditors* (October 2001) (The Ramsay Report can be found at <http://www.treasury.gov.au/documents/183/PDF/ramsay.pdf>) (2) the Joint Committee on Public Accounts and Audits *Report 391: Review of Independent Auditing by Registered Company Auditors* (September 2002) (See: <http://www.aph.gov.au/house/committee/jpaa/indepaudit/reportscript.pdf>), and (3) recommendations from the HIH Royal Commission. (HIH Royal Commission (Justice Neville Owen), *Report of the HIH Royal Commission*, 2003. At: <http://hihroyalcom.gov.au/finalreport>). The essence of CLERP 9 is the legislative decision that auditor independence was a governmental concern as well as a concern of the accounting profession. Australian reforms are principles-based, because they adopt the rules of the profession which in turn are based on International Accounting Standards.

⁷⁸ Japan responded, not to accounting failures but to the wave of overseas regulatory reforms that threatened to impact Japanese businesses and the Japanese accounting profession itself. The defining event for Japanese regulators was section 106(a) of Sarbanes-Oxley. This is the extra-territorial enforcement provision of the Act whereby the SEC and PCAOB are authorized to oversee foreign accounting firms if they perform statutory audits for firms listed on US exchanges. (See the comments of Naohiko Matsuo, Director for International Financial Markets, Japanese Financial Services Agency responding to the PCAOB’s proposed rules on January 26, 2004. See item 6 in the zip file associated with “Rulemaking Docket Matter 013” at: http://www.pcaobus.org/rulemaking_docket.asp). When the PCAOB initiated

of the 25 countries of the European Union, once the modifications to the Eighth Corporate Directive (84/253/EEC) are agreed upon. The European Commission recommended these changes in May 2003.⁷⁹

Thus, global changes are underway in corporate governance that very likely will reshape the way governments, corporations and their auditors relate to one another for years to come. Reforms involving the provision of tax services are central to this effort. Auditor-provided tax services have raised some of the most contentious governance issues.⁸⁰ The intensity of the controversy is directly related both to how lucrative tax services have become for major accounting firms, as well as how often the auditor's tax advice has become the source of corporate governance problems.⁸¹ Each of the highly publicized US security scandals involved either the tax positions taken by the companies

rulemaking procedures that would potentially bring Japanese auditing firms under direct US oversight, Japan began to replace its peer review system with an independent regulatory structure. Japan's response to Sarbanes-Oxley has two aspects: (a) the Japanese legislature amended the "Certified Public Accountant Law" (*Kouninkaikeishihou* 1948-8-1) through "An Act to Amend Part of the Certified Public Accounting Law" (*Kouninkaikeishihou no ichibu wo kaisei suru houritsu* 2004-4-1), and (b) the Japanese government issued Cabinet Office Ordinances (*Naikakuhurei* 2004-4-1). In the law, promulgated June 6, 2003, a new government oversight and inspection agency, the CPA and Auditing Oversight Board (CPAFOB) was established. In the Cabinet Ordinance at Article 5 rules on auditor independence were published. The Cabinet Ordinance rules are a literal translation of Sarbanes-Oxley section 201(a)(1)-(8).

⁷⁹ Commission of the European Community, Communication from the Commission to the Council and the European Parliament: Modernising Company Law and Enhancing Corporate Governance in the European Union - A Plan to Move Forward, COM(2003) 284 final, available at <http://europa.eu.int>

During the 1990's the convergence of accounting regulation was a major concern in the EU. The lack of a harmonized position on the role, position and liability of the statutory auditor was seen as a barrier to the development of the Single Market. Not only was the quality of European audits impacted, but the EU also felt handicapped when it tried to influence international accounting standards. This convergence theme was advanced in a Green Paper [European Commission Green Paper, The Role, the Position and the Liability of the Statutory Auditor within the European Union, 1996 O.J. (C 321) available at <http://europa.eu.int>], and was soon followed by a Communication from the Commission (1998) [Communication from the European Commission, The Statutory Audit in the European Union: The Way Forward, 1998 O.J. (C 143) available at <http://europa.eu.int>], a Consultative Paper [European Commission, Consultative Paper On: Statutory Auditors' Independence in the EU, (Dec. 15, 2000, available at <http://europa.eu.int>], a Commission Recommendation [European Commission Recommendation, Quality Assurance for the Statutory Audit in the European Union: Minimum Requirements, (Nov. 21, 2000) available at <http://europa.eu.int>], and finally a comprehensive study of auditor liability [European Commission, A Study on Systems of Civil Liability of Statutory Auditors in the Context of a Single Market for Auditing Services in the European Union, (Jan. 15, 2001) available at <http://europa.eu.int>].

⁸⁰ For a survey of the empirical literature in the US and UK on this issue see: Vivian Beattie and Stella Fearnley, *Auditor Independence and Non-Audit Services: A Review of the Literature* (2000) at 28-30. At: http://www.icaew.co.uk/library/index.cfm?AUB=TB21_63272,MNXI_63272 For a similar survey from an Australian perspective see the Ramsay Report. <http://www.treasury.gov.au/documents/296/PDF/ramsay2.pdf>

⁸¹ In a survey of SEC audit clients performed by the then Big 5 audit firms, the ratio of accounting and auditing revenues to consulting revenues dropped from approximately 6 to 1 in 1999 to 1.5 to 1 in 1999. For the year 1999, 4% of the Big 5 firm's SEC audit clients had consulting fees in excess of audit fees, up from 1% in 1990. Panel on Audit Effectiveness, *Report and Recommendations*, (2000) chaired by Shaun F. O'Malley at paragraph 5.14. At: <http://www.pobauditpanel.org/download.html>

or the determination of their tax reserves. The cases of Enron,⁸² Tyco,⁸³ and WorldCom⁸⁴ are only the most prominent examples.

If, however, the major accounting scandals of the past half-decade are predominantly concerned with income tax shelters, and mostly with shelters for income from developed countries, then, how do these events impact VAT administration in developing countries? There are two answers, both dealing with certifications.

First, the emerging trend in security regulation is to demand C.E.O. and C.F.O. certification of internal controls over corporate cash flow (as well as traditional profit and loss amounts). Because VAT obligations can be 20% of sales, the use of certified VAT compliance software systems significantly reduces corporate cash flow certification risks. Thus, governments willing to certify tax compliance software reduce risks of foreign investment.

Certification of internal controls over cash flow. To counteract the tax shelter industry the SEC now compels corporate management and the statutory auditor to alert shareholders to high-risk tax shelter transactions. It does this through certifications that directly consider cash flow statements.⁸⁵ Under severe personal penalty,⁸⁶ the C.E.O. and

⁸² Peter Behr and April Witt, *Visionary's Dream Led to Risky Business: Opaque Deals, Accounting Sleight of Hand Built an Energy Giant and Ensured Its Demise*, Washington Post, July 28, 2002, at A-1

⁸³ Mark Maremount and Laurie P. Cohen, *New York Prosecutors Seek Auditor Link in Tyco Probe*, Wall Street Journal Europe, September 30, 2002, at A-1.

⁸⁴ Carrie Johnson and Ben White, *WorldCom Arrests Made: Two Former Executives Charged with Hiding Expenses*, Washington Post, August 2, 2002, at A-1.

⁸⁵ The concern with cash flow accountability constitutes a change in emphasis for the SEC. Securities and Exchange Commission, *Final Rule: Certification of Disclosure in Companies' Quarterly and Annual Reports*, (RIN 3235-A154) at II(B)(3) available at <http://www.sec.gov/rules/final/33-8124.htm>

The certification, as adopted, states that the overall financial disclosure fairly presents, in all material respects, the company's financial condition, results of operations and **cash flows**. We have added a specific reference to **cash flows** even though Section 302 of the Act does not include such an explicit reference. We believe that it is consistent with Congressional intent to include both income or loss and cash flows within the concept of "fair presentation" of an issuer's results of operations.

The certification statement regarding fair presentation of financial statements and other financial information is not limited to a representation that the financial statements and other financial information have been presented in accordance with "generally accepted accounting principles" and is not otherwise limited by reference to generally accepted accounting principles. We believe that Congress intended this statement to provide assurances that the financial information disclosed in a report, viewed in its entirety, meets a standard of overall material accuracy and completeness that is broader than financial reporting requirements under generally accepted accounting principles. In our view, a "fair presentation" of an issuer's financial condition, results of operations and **cash flows** encompasses the selection of appropriate accounting policies, proper application of appropriate accounting policies, disclosure of financial information that is informative and reasonably reflects the underlying transactions and events and the inclusion of any additional disclosure necessary to provide investors with a materially accurate and complete picture of an issuer's financial condition, results of operations and **cash flows**. (Emphasis added).

⁸⁶ *Sarbanes-Oxley Act*, *supra* note 74, at § 906. (Amending the criminal code and imposing a fine of not more than \$1,000,000 and 10 years in prison, or both, for a signing officer who certifies a report "knowing")

C.F.O. must certify on a quarterly basis (a) that they have designed⁸⁷ internal controls to monitor corporate cash flow, (b) that they have evaluated⁸⁸ the performance of the cash flow controls within the past 90 days, and (c) that the results of this examination and any material weaknesses discovered in them have been disclosed.⁸⁹ Systemic errors that point to the design of internal controls over cash flow need to be disclosed and quickly remedied. To fail to do so would risk the delisting of corporation from exchanges.⁹⁰

Certification of automated consumption tax software solutions. To satisfy VAT collection and reporting obligations globally, multinational companies have for a long time turned to software solutions. But now the risks are higher, and the pressure is to satisfy the quarterly certification and disclosure requirements imposed by the S.E.C. and parallel regimes in the E.U., Australia, U.K., France, and Japan. Multi-national enterprises are looking for certification of their automated systems to do this.

Because multi-national enterprises have global VAT obligations, the software certifications they seek are also global in reach. In this regard, the two May 2005 *Guidance Notes* of the O.E.C.D., the *Guidance for the Standard Audit File – Tax*,⁹¹ and the *Guidance on Tax Compliance for Business and Accounting Software*⁹² assume a critical importance. These OECD *Guidance Notes* are a first effort to develop a tax-specific international software certification regime.

It is clear that the O.E.C.D. anticipates the development of software certification programs similar to those under the SSUTA. Some certifications may be single-jurisdiction based, while others may be multi-jurisdictional. The O.E.C.D.'s work expressly references the software certification aspects of SSUTA.⁹³ They also expressly link this software-standard setting effort to the rules of corporate governance developing

it to be false. For a “willful” violation the penalties rise to not more than \$5,000,000, 20 years in prison, or both.

⁸⁷ 17 CFR 240.13a-14(a), or Exchange Act Rules 13a-14(a) at item 4(a) (the CEO and CFO certify that they have “designed” the internal controls over cash flow.)

⁸⁸ *Id.* at item 4(b) (the CEO and CFO certify that they have “evaluated” the internal controls over cash flow.)

⁸⁹ *Id.* at item 4(c) (the CEO and CFO certify that they have “disclosed material weaknesses” in the internal controls over cash flow.)

⁹⁰ Nasdaq, Summary of Nasdaq Corporate Governance Proposals As of February 26, 2003 (2003) (revising the earlier November 20, 2002 proposals) at 4-5 available at <http://www.nasdaq.com>; New York Stock Exchange, Corporate Governance Rule Proposals Reflecting Recommendations from the NYSE Corporate Accountability and Listing Standards Committee (As Approved by the NYSE Board of Directors August 1, 2002) at 17-18 available at <http://www.nyse.com/pdfs/corp>.

⁹¹ *Guidance Note: Audit File*, O.E.C.D., *supra* note 23, at 3. (The audit file standards are intended to function as “... a comprehensive description of the Standard Audit File for tax compliance checking purposes [which] ... contain[s] reliable accounting data exportable from an original accounting system, for a specific time period and easily readable by virtue of its standardization of layout and format that can be used by revenue authority staff for compliance checking purposes.”)

⁹² *Guidance Note: Accounting Software*, O.E.C.D., *supra* note 24.

⁹³ *Facilitating Collection of Consumption Taxes*, O.E.C.D., *supra* note 22, at 10 & 17-21; *Automating Consumption Tax Collection*, O.E.C.D., *supra* note 19, at 10-14.

under the Sarbanes-Oxley Act, and the International Financial Reporting Standards that will become mandatory throughout the E.U. by the close of 2005.⁹⁴

PART 2: THE PROPOSAL:

A DIGITAL VAT (D-VAT) FOR LARGE TAXPAYERS

How should a developing country respond to the argument set out above? Developing countries that have VATs, and that share the revenue profile considered in the opening section of this article might consider offering a fully digital, certified VAT compliance option for all enterprises in their large taxpayer groups.⁹⁵ The C.E.O. and C.F.O. of these enterprises would most likely welcome such a VAT regime. In doing so, developing countries would be following the example of the E.U. under Article 26c, adopting a full digital solution for VAT compliance in a defined segment of the economy.

The Digital VAT should include a program to certify software solutions in VAT compliance similar to that under the SSUTA. Software solutions should satisfy the May 2005 O.E.C.D. *Guidance Notes*, the *Guidance for the Standard Audit File – Tax*,⁹⁶ and the *Guidance on Tax Compliance for Business and Accounting Software*.⁹⁷

In addition, developing countries should consider adopting aspects of the SSUTA, particularly the trusted third party option of the CSP,⁹⁸ as well as the alternative CAS,⁹⁹ and CPS¹⁰⁰ models. Certification should be similarly linked to provisions for audit immunity (barring fraud and misrepresentation).¹⁰¹ The CSP option in developing countries should be available to large taxpayers at no cost.¹⁰² As with the SSUTA there

⁹⁴ *Guidance Note: Accounting Software*, O.E.C.D., *supra* note 24, at 11. (“This guidance is published at a time when corporate governance is under scrutiny as never before, as Governments worldwide demonstrate a firm resolve to increase corporate responsibility and accountability through legislations such as the Sarbanes-Oxley Act in the US, and the EU ruling that all listed companies in Europe must adopt the International Financial Reporting Standards by 2005 at the latest. This guidance does not deal with Corporate Governance issues specifically, but its key principles, especially in the establishment of internal controls and access to data entry for compliance and substantive testing of these controls will be a useful tool in enabling businesses to meet the essential requirements of this type of legislation.”)

⁹⁵ There is a policy question at this point between voluntary and mandatory D-VAT options. In both the E.U. and the U.S. participation in the digital consumption tax regime is elective. There are good reasons for this in terms of the business acceptance of these systems, but those reasons have a lot to do with the scope of these regimes. Both the SSUTA and Article 26c are open to businesses large and small. There may well be concerns that small businesses will find a fully digital system unnecessarily burdensome. This would not be the case under the proposed D-VAT for developing countries, because it is limited by definition to the very largest taxpayers, and it is very unlikely that these enterprises are determining VAT obligations manually. There may of course be other reasons for resistance to a D-VAT in developing countries relating to the kinds of enforcement issues that were in turn the reason for setting up large taxpayer units in these countries to begin with.

⁹⁶ *Guidance Note: Audit File*, O.E.C.D., *supra* note 21.

⁹⁷ *Guidance Note: Accounting Software*, O.E.C.D., *supra* note 22.

⁹⁸ SSUTA, *supra* note 3, at § 501 (B).

⁹⁹ SSUTA, *supra* note 3, at § 501 (C).

¹⁰⁰ SSUTA, *supra* note 3, at § 501 (D).

¹⁰¹ USUTA, *supra* note 57, at § 9(a).

¹⁰² This would involve transferring the value of the “float” on the VAT to the benefit of the CSP.

will need to be a clear commitment by the tax administration to cooperate with the CSP and other CAS and CPS automated system developers in the provision of accurate and timely information about rate changes and other tax determinant variables. CSP's will need to be expressly relieved of liability from having charged, collected or remitted incorrect amounts of tax, if the error was due to erroneous data provided by the state.¹⁰³

Such a proposal would constitute a comprehensive (horizontal and vertical) e-solution to VAT compliance at the large taxpayer level. It would contain the promise of increasing VAT revenue, streamlining reporting requirements, and stimulating economic development, foreign direct investment and integration of local businesses into the global marketplace.

Because e-solutions to consumption tax compliance issues have been strongly promoted by business globally, almost every country with a VAT already possesses at least part of the D-VAT. The objective therefore is to complete the vertical aspect (provide rules for comprehensive digital compliance within a country) and then develop the horizontal aspect (adopt rules for the harmonization of domestic VAT with international standards relating to the audit file, software certifications and trusted third party arrangements). Each of the sections below will consider one attribute of the D-VAT by drawing upon examples found in either in the E.U. or the U.S.

Digital notices, returns, periodic and recapitulative statements. Council Directive 2002/38/EC¹⁰⁴ of May 7, 2002 made four significant changes to the *Sixth Directive* with respect to digitizing the E.U. VAT. None of these changes are mandated. In each instance taxpayers are allowed to apply these e-solutions at their own election throughout the E.U. However, the Directive also permits any Member State to go further and mandate adoption of any of these solutions by all taxpayers. No Member State has done so.

First, the requirement to provide notice that taxable activity has begun, or has terminated,¹⁰⁵ can be performed electronically.¹⁰⁶ Secondly, VAT returns that formerly were entirely paper, may now be filed in every Member State electronically.¹⁰⁷ Similar all periodic, and recapitulative statements may now be filed in every Member State electronically.¹⁰⁸

Digital invoices. Far more important to digitizing the VAT is the digitization of the invoice. All of the bedrock principles of the standard credit-invoice VAT are embedded in the invoice.¹⁰⁹ Almost all critical legal, accounting, reporting, and

¹⁰³ SSUTA, *supra* note 3, at §306.

¹⁰⁴ The Digital Sales Directive, *supra* note 2.

¹⁰⁵ *Sixth Council Directive* *supra* note 4 at (Old) Art. 22(1)(a)

¹⁰⁶ *Id.* *Sixth Directive* at (New) Art. 22h, added by The Digital Sales Directive, *supra* note 2.

¹⁰⁷ *Id.* *Sixth Directive*, at (New) Art. 22(4)(a), as amended by The Digital Sales Directive, *supra* note 2.

¹⁰⁸ *Id.* *Sixth Directive*, at (New) Art. 22(6)(a) on periodic statements, and Article 22(6)(b) on recapitulative statements, both as amended by The Digital Sales Directive, *supra* note 2.

¹⁰⁹ Other than the invoice, there are seven other critical administrative aspects of the European VAT. They are: (1) registration, (2) identification numbers, (3) keeping accounts, (4) keeping a register, (5) submitting a return, (6) submitting a statement, and (7) submitting a recapitulative statement. Each of these is readily

enforcement issues are tied to information found there.¹¹⁰ An invoice performs three basic functions: (1) it contains the information needed to determine which VAT regime is applicable to a particular transaction, (2) it enables tax authorities to carry out enforcement controls, and (3) it allows the purchaser to prove their right to deductions.¹¹¹

The D-VAT would require that all invoices be digital. Once again, developing countries can look to the E.U. for recent developments in this area.

There is nothing in the original *Sixth Directive* that considers electronic invoicing. Old Article 22(3)(c) is silent.¹¹² However, Article 28h that was adopted as a result of *Council Directive 2001/115/EC*¹¹³ amends Article 22(3)(c) to unambiguously authorize the use of electronic invoices, subject to a customer's acceptance.¹¹⁴ The caveat requiring customer's acceptance is important, and should be carried over in a developing country context. Even though a digital invoicing may be workable for large taxpayers, it is not always workable in B2B transactions with small businesses, nor is it always practical in B2C transactions. In instances where invoices need to be issued in traditional paper form, digital record of them should also be required. This will facilitate remote audits.

The amendments of Article 28h go to great lengths to establish a new legal framework within which Member States must accept electronic invoices. "Invoices sent by electronic means shall be accepted by Member States provided that the authenticity of the origin and integrity of the contents are guaranteed [either] by means of advanced electronic signature¹¹⁵ ... or by means of electronic data interchange¹¹⁶ (EDI)..."¹¹⁷

susceptible to, and accepted in digitized form in the E.U. *Sixth Directive, supra* note 4, at (New) Art. 22, as amended by The Digital Sales Directive, *supra* note 2.

¹¹⁰ Alan Schenk notes in the Commentary to the ABA Model VAT that: "The seller's invoice is a key element in an invoice VAT. At levels before the retail sale, the VAT listed on the seller's invoice can be used to cross-match the seller's output tax liability against the buyer's input credit on its purchases. ... Experience in Europe suggests that civil servants do not have much time to cross-match invoices. See Carlson, *Value Added Tax: European Experiences and Lessons for the United States*, reprinted in 1980 Department of Treasury (Office of Tax Analysis) 51. Korean and Taiwan have relied on an elaborate computer system of cross-matching invoices sent to the government by the seller and the buyer." ALAN SCHENK, *VALUE ADDED TAX – A MODEL STATUTE AND COMMENTARY*, 1989 A.B.A. SEC. TAX 120 n.294.

¹¹¹ AG Sir Gordon Slynn famously characterized the invoice as "the admission ticket to deduction." Case 123/87 *Léa Jorion, née Jeunehomme v. Belgian State*, 1988 E.C.R. 4517.

¹¹² *Sixth Directive, supra* note 4, at (New) Art. 22(3)(c), as amended by Article 28h added by The Digital Sales Directive, *supra* note 2 reads simply: "The Member State shall determine the criteria for determining whether a document serves as an invoice."

¹¹³ The Invoicing Directive, *supra* note 2, at 24.

¹¹⁴ *Sixth Directive, supra* note 4, at (New) Art. 22(3)(c), as amended by Article 28h added by The Digital Sales Directive, *supra* note 2, now states: "Invoices issued pursuant to point (a) may be sent either on paper or, subject to an acceptance by the customer, by electronic means."

¹¹⁵ *Sixth Directive, supra* note 4, at (New) Art. 22(3)(c), as amended by Article 28h added by The Digital Sales Directive, *supra* note 2, specifically references the electronic signatures rules in Article 2(2) of Directive 1999/93/EC, of 13 December 1999 on a Community framework for electronic signatures, 2000 O.J. (L 13)12, available at http://europa.eu.int/eur-lex/pri/en/oj/dat/2000/l_013/l_01320000119en00120020.pdf

¹¹⁶ *Sixth Directive, supra* note 4, at (New) Art. 22(3)(c), as amended by Article 28h added by The Digital Sales Directive, *supra* note 2, specifically references electronic data interchange (EDI) as defined in Article

Two additional modifications, made to Article 22 by Directive 2001/115/EC also pave the way for standardized electronic invoicing in the E.U. The first allows third parties to prepare invoices (outsourcing),¹¹⁸ and second sets out the exclusive legal requirements for valid invoices.¹¹⁹

A D-VAT should incorporate both of these provisions. The first is needed for a workable system that employs CSP's, who should be authorized to act as agents for the production of taxpayer invoices. The second is needed for the efficient automation of international, cross-border invoicing, which is a critical aspect of the horizontal aspect of the D-VAT. Developing countries would be wise to follow the E.U lead in both of these matters.

2 of Commission Recommendation 1994/820/EC of 19 October 1994 relating to legal aspects of electronic data interchange O.J. (L 338) 98, available at <http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31994H0820:EN:HTML>

¹¹⁷ *Sixth Directive*, *supra* note 4, at Art. 22h(c)(second paragraph), as amended by The Invoicing Directive, *supra* note 2.

¹¹⁸ *Sixth Directive*, *supra* note 4, at (Old) Article 22(3) required the taxable person to issue his or her own invoice. The Invoicing Directive, *supra* note 2, amends Article 22(3)(a) in the following manner (additions in italics):

Every taxable person shall *ensure that an invoice is issued, either by himself or by his customer or, in his name and on his behalf, by a third-party*, in respect of goods and service which he has supplied or rendered to another taxable person or to a non-taxable legal person. Every taxable person shall also *ensure that an invoice is issued either by himself or by his customer or, in his name and on his behalf, by a third party*, in respect of the supplies of goods, ...

¹¹⁹ *Id.* at Art. 22(3)(b), as amended by The Invoicing Directive, *supra* note 2. There are 12 items (and occasionally two additional items) that must appear on an invoice:

- (1) the date of issuance of the invoice;
- (2) a sequence number that uniquely identifies the invoice;
- (3) the VAT identification number of the seller;
- (4) the VAT identification number of the buyer (if the customer is required to pay VAT on the transaction);
- (5) full name and address of the buyer;
- (6) the quantity and nature of the good/ extent and nature of the services supplied;
- (7) the date on which the supply was completed, or the date on which the payment was made – in so far as that date can be determined and differs from the date of issuance of the invoice, (1) above;
- (8) the taxable amount; unit price exclusive of tax, discounts, and rebates;
- (9) the VAT rate applied;
- (10) the VAT amount payable;
- (11) where either an exemption applies, or where the buyer is liable self-assess the VAT, reference to the section of the *Sixth Directive* or the national law that allows this procedure;
- (12) special rules for the supply of new means of transportation require particulars under Article 28a(2);
- (13) special rules related to margin schemes require reference to national laws;
- (14) in instances where a tax representative is used, then the VAT identification number as well as the name and address of that representative needs to be listed.

It should be noted that the specific requirement in the original Directive, and the proposal for this Directive, that reference must be made to Article 28c(E)(3) in the case of triangulation transaction has been deleted.

A final invoice-related element (also added by Directive 2001/115/EC) appears in the third subparagraph of Article 22(3)(b). It stipulates that, “Member States shall not require invoices to be signed.” The Explanatory Memorandum to the Proposal that advanced this provision explained that it was needed to remove a barrier to electronic invoicing. A similar rule should be adopted in a developing country’s D-VAT.

Certification of service providers and VAT compliance software. The D-VAT would authorize the tax administration to certify third party service providers and VAT compliance software. In this regard the CSP, CAS and CPS concepts from the SSUTA will be applied, along with principles and standards for certification of the standard audit file and tax compliance accounting software of the O.E.C.D.

Adoption of the CSP, CAS and CPS concepts. Regardless of the concept applied, certain assurances need to be provided by the government to make trusted third party and in-house automated VAT systems work properly. In most cases this is simply a matter of the government providing information on rate and base changes with sufficient lead-time so that software can be updated, tested and reinstalled in business operating systems.

Under the SSUTA the States have agreed to provide a downloadable taxability matrix of changes,¹²⁰ and have promised to make those changes effective only the first day of a calendar quarter.¹²¹ In conjunction with these promises the States also agreed not to hold CSPs or other software developers liable for over or under assessments of taxes if the errors are attributable to government errors in the taxability matrix.¹²² CSPs and software developers however would be liable for errors of their own making.¹²³

In the instance of the CSP it would be expected that all VAT compliance functions would be transferred to the CSP, the determination of taxability, calculation of the tax, provision of e-invoices, maintenance of the tax audit file, production of VAT returns, and payment of VAT liabilities. Under CAS only the tax calculation function is provided by third-party software. The remaining tax functions are still the responsibility of the taxpayer. With CPS the tax calculation software is proprietary and would need to be certified on an individual basis.

In the CSP and CAS environment, “the tax calculation and audit file process can be located remotely in a secure environment by the CSP [or CAS] or on a server at the seller’s (merchant’s) location.”¹²⁴

Although the CSP, CAS, and CPS concepts have their genesis with the SSUTA, a retail sales tax system, they would be far more effective in a VAT. The critical accuracy

¹²⁰ SSUTA, *supra* note 3, at § 328.

¹²¹ SSUTA, *supra* note 3, at § 304.

¹²² SSUTA, *supra* note 3, at § 306.

¹²³ USUTA, *supra* note 56, at § 9(a).

¹²⁴ Charles Collins, “Benefits of Certified Tax Systems,” in 2 CFO PROJECT 208, 210 (Oct. 1, 2003), available at www.CFOProject.com

component (calculating the correct tax) using accurate rates, and taxability determinations, benefits considerably from the inherent “self-checking” attribute of the credit invoice VAT.¹²⁵ Buyers and sellers have an incentive to assure correct determinations in a VAT, whereas under a retail sales tax where the SSUTA operates, the accuracy of the digital record is dependent on state oversight of the CSP, CAS or CPS. This level of technical oversight is not only expensive in the SSUTA, it is dependent on government initiative.

Linear tax systems, like the retail sales tax, have always had an Achilles heal; the government audit staff. Without an adequately trained, vigorous, and motivated audit staff equity suffers under the SSUTA. The SSUTA does not repair this Achilles heal it only moves it into a software oversight function. By fully automating the VAT invoice and having access to comprehensive data files the revenue authority overseeing the D-VAT will be able to quickly match invoices among the largest taxpayers.

Certification. The SSUTA certification process involves measuring software against three third party standards; (1) the AICPA’s SAS 94¹²⁶ and (2) the US- GAO Federal Information Systems Control Audit Manual.¹²⁷ In addition, CSP’s and CAS software developers must comply with ISO Number 17799¹²⁸ of the International Organization for Standardization.¹²⁹ A similar set of standards for certification can be found in the recent O.E.C.D. materials.¹³⁰

Essentially the certification process involves two steps; (1) an extensive security check of the software system, the developer and the service provider, and (2) a comprehensive test of tax calculation and return preparation capabilities is conducted by building hypothetical tax scenarios and processing them through the system.

¹²⁵ REPORT OF THE FISCAL AND FINANCIAL COMMITTEE ON TAX HARMONIZATION IN THE COMMON MARKET. CCH: Document SD-322 (1963) [commonly known as THE NEUMARK REPORT after the Chairman of the Commission, Professor Fritz Neumark].

¹²⁶ 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*.

¹²⁷ 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>.

¹²⁸ INTERNATIONAL ORGANIZATION FOR STANDARDIZATION, ISO 17799: INFORMATION TECHNOLOGY, SECURITY TECHNIQUES, CODE FOR INFORMATION SECURITY MANAGEMENT (ISO/IEC 17799:2005).

¹²⁹ STREAMLINED SALE TAX PROJECT, CERTIFICATION STANDARDS (rev. 5/17-04) available at <http://www.streamlinedsalestax.org/> (provides a detailed application of SAS 94, FISCAM and ISO 17799 to the SSUTA).

¹³⁰ 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.” Although this discussion is broader than that found in SSUTA documents, the end result is that the SSUTA the O.E.C.D. uses the term “certification” in this same manner. *Facilitating Collection of Consumption Taxes*, O.E.C.D., *supra* note 22, at 17-18.

Uniform product and service identifier codes. The D-VAT requires the digital identification of each good or service in the economy. Codes will be nationally determined. Mapping product or service skew numbers to these universal codes will permit the CSP (or CAS and CPS) to determine the correct tax.

If this process was starting from scratch, this task would be daunting for a developing country. Fortunately however, two data-bases are readily available for this purpose, and are commonly used for VAT and trade reporting: the CN8 codes¹³¹ are used in the EU to identify movements of goods, and the UN CPC¹³² codes are used to numerically identify services as well as goods transactions. Alternate coding systems could be developed using UPC codes, for example, but the advantage of adopting an already workable system both for cross-border tax enforcement, and for taxpayer acceptance (particularly for those businesses already using these codes in international VAT compliance) is an important consideration. It is a relatively simple matter to associate these codes with customs coding and extend the functionality of the D-VAT to automate both customs and VAT administration for large taxpayers in one system.¹³³

Remission of funds by and compensation of the CSP. Under the CSP model a trusted third party not only determines the correct tax and fill out the appropriate returns, forms and reports, it remits the tax to the government on behalf of the taxpayer, on time and through electronic means.

There are two traditional ways to remit funds electronically. Both employ proven technology and are used effectively with large-scale transfers of taxes to governments. One utilizes an Automated Clearing House (ACH) debit mechanism, and the other an ACH credit mechanism.

The Electronic Federal Tax Payment System (EFTPS) is an example of an ACH debit mechanism. In 1993 Congress mandated EFTPS as part of the North American

¹³¹ The EU classification system can be found at:

http://europa.eu.int/comm/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=CN_2005&StrLanguageCode=EN&IntPcKey Norbert Ranier (Statistics Austria) presents a recent assessment of developments in global economic classification systems, explaining the effort to harmonize EU and UN classification systems. He indicates that, “[a] thorough revision of the international statistical classifications has recently been completed, with the result that the new classifications have been developed as an integrated system of statistical classifications, whereby a) the various product classifications have been harmonized and b) the central product classifications have been related to the classifications of economic activities by the economic origin criterion. In addition, the European Union’s classifications have been harmonized with global classifications. This also applies to the national classifications of the EU Member States.” Norbert Ranier, *Revised System of International Classifications*. This study is at:

http://europa.eu.int/comm/eurostat/ramon/other_documents/index.cfm?TargetUrl=DSP_READINGS#rainer

¹³² UN CPC (Central Product Classification, Version 1.0) is, “A classification of products based on the physical characteristics of goods or on the nature of the services rendered. CPC provides a framework for collection and international comparison of the various kinds of statistics dealing with goods and services. CPC covers products that are an output of economic activities, including transportable goods, non-transportable goods and services.” It is available at: <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=3>

¹³³ de Wulf & McLinder, *Information Technology in Customs*, *supra* note 16. (Providing a comprehensive survey of recent ICT applications applied to customs clearance. Concluding that it is now feasible and cost effective for even the poorest countries to employ proven off-the-self ICT applications.)

Free Trade Agreement Implementation Act. EFTPS was an efficiency provision intended to fund a portion of the budget impact of the legislation.¹³⁴ EFTPS exclusively uses the remitONE System of First Data Corporation's subsidiary, First Data Government Solutions (FDGS), for EFTPS transactions both domestic and international. "In fiscal year 2003, the federal government collected almost \$1.5 trillion through EFTPS."¹³⁵

FDGS offers the remitONE System through the banking system. "The system provides for several input methods: Internet, personal computer (PC), touch-tone phone, and live operator. Each bank signs a contract with FDGS defines which of these value-added services they may offer their customers. [All together] the remitONE System covers 175 taxing authorities and support over 1,700 total tax types across all authorities."¹³⁶ Under this system a business makes a tax payment by authorizing withdrawal of the payment from its account at a participating bank (on a specified future date). The funds are then placed in a bank-controlled impounding account. On the payment date, the funds are then withdrawn by the U.S. Treasury and transmitted to a Treasury account at a Federal Reserve Bank via an ACH debit transfer.

Importantly, it is the federal government (not FDGS and not the bank) that initiates the ACH transfer (ACH debit). "Federal payments are batched and sent to the EFTPS through the bulk filer program, and EFTPS issues an ACH transaction to debit the bank impounding account and credit the U.S. Treasury. The bank retains any interest earned on the impound account ..."¹³⁷

A different way of accomplishing the same electronic transfer places the bank in the role of the transfer agent. This is the approach adopted by FDGS's State EFT System. Under this system tax payments are once again transferred to a bank's impounding account on instructions by the taxpayer, but in this instance "... an ACH credit file is prepared for state payments ... Upon receipt of the [instructions from the taxpayer], the bank debits the taxpayer's account(s) and credits the bank's impounding account. For state and local authorities, the bank distributes the taxes collected directly to each taxing authority from the bank's impounding account on the date they are due."¹³⁸

Under the SSUTA the States are required to accept tax payments under either ACH credit or ACH debit.¹³⁹ Additionally, the SSUTA expects that if a taxpayer uses a

¹³⁴ U.S. House Committee, (1993, pp. 4, 88, 105-6, 16305 and 170). EFTPS is described in US DEPT. TREAS., INTERNATIONAL ELECTRONIC FEDERAL TAX PAYMENT/DEPOSIT INSTRUCTION BOOKLET (Oct. 2002) available at <http://www.fms.treas.gov/eftps/dib.pdf>

¹³⁵ Kenneth D. Garbade, John C. Partlan and Paul J. Santoro, *Recent Innovations in Treasury Cash Management* in FEDERAL RESERVE BANK OF NEW YORK, CURRENT ISSUES IN ECONOMICS AND FINANCE 6-7 (Nov. 2004) available at http://www.newyorkfed.org/research/current_issues

¹³⁶ ERNST & YOUNG, L.L.P., REPORT ON CONTROLS PLACED IN OPERATION AND TESTS OF OPERATING EFFECTIVENESS OF THE REMITONE AND STATE EFT SYSTEMS 4 (Nov. 9, 2004) (on file with author).

¹³⁷ *Id.* at 5.

¹³⁸ *Id.* at 5.

¹³⁹ SSUTA, *supra* note 3, at § 319 (C).

CSP, then that CSP is "... an agent to perform for all the seller's sales or use tax functions, other than the seller's obligation to remit tax on its own purchases."¹⁴⁰

Because the CSP is "... liable for sales and use taxes due each member state on all sales transactions it processes for the seller ..."¹⁴¹ it is expected that the CSP (not the bank) will be in control of an impounding account under either an ACH debit system (like FDGS's remitONE) or an ACH credit system (like FDGS's State EFT System). This must be the case, because, "... 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 types of items it sells or committed fraud."¹⁴²

No CSP would step forward and assume liability for a seller's obligation to remit taxes, if it did not have assurance that it would have in its possession all of the funds required to be remitted. CSP's therefore, have an interest in getting the tax receipts as close to the transaction date as possible, not only because a portion of their compensation comes from the value of the "float" on those funds between the day they are received and the time when they are required to be remitted, but also because they are obligated to make tax payment to the State. Most likely this transfer will be accomplished through an earlier ACH (debit) transactions where the CSP debits the taxpayer's account on some predetermined schedule for amounts determined to be due based on transactions already processed.

There are provisions for additional measures of compensation under the SSUTA for a CSP, CAS or CPS. These amounts are contractual between the CSP, CAS and CPS and the State. They may be based on (1) a base rate that applies to taxable transactions processed, or (2) a percentage of the generated in instances where sellers without nexus volunteer to collect sales taxes for a state because they have adopted one of the certified systems.¹⁴³

The D-VAT will need to have provisions similar to those in the SSUTA that will both assign liability for remitting the VAT to the CSP, relieving the taxpayer of that obligation, as well as determining the method (ACH debit or ACH credit, or some other system) by which the CSP will transfer the tax receipts to the government. Conditions like requiring that the funds always remain in an account within the country, as well as requiring the tax data to be hosted in a secure facility within the country are to be expected.

CONCLUSION

¹⁴⁰ SSUTA, *supra* note 3, at § 403(A).

¹⁴¹ USUTA, *supra* note 57, at § 9(a) (as approved by the Streamlined Sales Tax Project on Dec. 22, 2000, and amended on Jan. 22, 2001), and as § 10(a) of the Simplified Sales and Use Tax Administration Act (as adopted by the National Conference of State Legislatures' Executive Committee on Jan. 27, 2001).

¹⁴² *Id.* at § 9(a).

¹⁴³ SSUTA, *supra* note 3, at §§ 601-03.

The D-VAT proposed here is a technologically intensive, fully automated VAT that is made available or mandated for the large taxpayers. All invoices, statements, reports, returns, and notices are electronic. All payments, refunds and most audit functions will be digital. The Digital VAT requires uniform digital identification of each good or service transaction in the economy. Nationally defined, internationally harmonized product and service codes will be used. The D-VAT will certify service providers (CSPs) whose automated invoicing, tax calculation, collection and return preparation and funds payment systems will conform to the highest international standards as set out by the O.E.C.D. The D-VAT will allow outsourcing of all VAT compliance obligations to trusted third parties, thereby improving accuracy and efficiency. As under the SSUTA use of a CSP will be at no cost to the taxpayer, and except for misrepresentation or fraud, will immunize users from liability for calculation or reporting errors. The D-VAT will also certify third-party software systems (CAS), and proprietary systems (CPS).

Are developing countries ready for a D-VAT? William Vickrey and Benjamin Higgins believed developed and developing economies were ready for it 50 years ago, when automation meant IBM punch cards.¹⁴⁴

It is very clear that the E.U. sees the D-VAT as the future. Article 26c is more than a solution for cross-border digital sales from businesses not established in the E.U. that make sales to consumers within the E.U., it is a microcosm of the future. Council Directives 2002/38/EC and 2001/115/EC have cleared much of the way for a full D-VAT with digital invoices, statements, reports, returns, and notices. But as the Commission Proposal of October 2004 ((COM(2004) 728 final) points out, the E.U. is having difficulty with using the Treasury of Member States as the administrative and financial intermediary,¹⁴⁵ and consequently the way the SSUTA is working with the CSP concept in getting a lot of attention in the E.U.

It is equally clear that the 7,588 consumption tax jurisdictions in the U.S. see things the same way the E.U. does, but they have gone further. The States have designed

¹⁴⁴ Adapting tax systems to automation is not a new idea. At the dawn of the computer age the noted economist, William Vickrey asked, in a US context: “Does EDP open up possibilities for reforming the way in which tax liability is defined?” Vickrey answered, “What is required is a re-thinking of the problems of tax policy in terms of socially desirable goals. Once the problem has been defined and alternative choices explored, then the machines can be adapted to fit the requirements of the solution. As automation increases, the whole social structure of our environment will be subject to revolutionary change; tax administration must keep abreast of this change.” William Vickrey, *Electronic Data Processing and Tax Policy*, 14 NAT’L. TAX J. 271 at 271 and 285 (September 1961). Benjamin Higgins, Director of the MIT Center for International Studies made similar observations. The context this time was a tax advisory mission to Indonesia. “It became apparent that conceptually simple extensions of existing statistical operations would permit the government to follow the flow of goods through every stage of the economy, providing the base for a completely efficient system of income, sales and excess inventory taxes. ... With these materials an appropriate system of coding and [IBM computer] cards, it would be technically possible to compute for any period after the starting date, the average stocks, sales, and incomes of every firm.” Benjamin Higgins, *Self-Enforcing Incentive Tax System for Underdeveloped Countries*, in *ECONOMIC DEVELOPMENT: PRINCIPLES, PROBLEMS AND POLICIES* (1959) 531-532.

¹⁴⁵ See *Infra* note 25 and accompanying text.

a trusted third party system, and have pilot tested the determination, collection and remission of multi-jurisdictional sales and use taxes using this system in four states.

All of these developments are being closely watched. The O.E.C.D. is advancing international standards for the audit file, and the certification of automated systems that closely track the certification standards under the SSUTA.

Businesses too are watching, and for two very good reasons: efficiency and risk aversion. In the first instance, because enterprise data is already digital, thus efficiency dictates that fully automated VAT compliance is the preferred route. 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 99.993 percent of the three billion gigabytes of data generated worldwide (using 1999 data) was computer generated.¹⁴⁶ Updated in 2002, a new study reached much the same conclusions, and indicated (using 2001 and 2002 data) that "... about 5 exabytes¹⁴⁷ 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%."¹⁴⁸ 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.

If the provenance of most data today is digital, not physical, then it makes sense to determine, collect, report, and enforce tax obligations digitally. The credit-invoice VAT is the consumption tax that most completely tracks the digitized commercial processes. The D-VAT is perfectly fit to commerce. Whenever manual intervention is required to resolve returns, reports, and other filings into paper documents, the tax systems are being made inefficient and error prone. The risks associated with compliance errors leads to the second business concern, governance reform.

Globally, corporate governance regimes are converging. As a consequence of Enron, WorldCom, Vivendi, Ahold, Parmalat, HIH and One.Tel multinational companies in developed countries, the CEOs and CFOs in particular, are required to seek out and adopt real-time, low risk systems with which they can demonstrate real time internal

¹⁴⁶ School of Information Management and Systems at the University of California at Berkeley study, "How Much Information?" reported in Eric Woodman, *Information Generation: Berkeley Study measures gargantuan information boom*, EMC2, available at http://www.emc.com/news/in_depth_archive/10192000_berkeley.jsp

¹⁴⁷ Peter Lyman and Hal R. Varian, *How Much Information? 2003* (School of Information Management and Systems at the University of California at Berkeley, release date October 27, 2003), at Executive Summary, available at http://www.sims.berkeley.edu/research/projects/how-much-info-2003/printable_report.pdf. ("How big is five exabytes? If digitized, the 19 million books and other print collections in the Library of Congress would contain about ten terabytes of information; five exabytes of information is equivalent in size to the information contained in half a million new libraries the size of the Library of Congress print collections.")

¹⁴⁸ *Id.* at Executive Summary.

controls over corporate cash flows. SSUTA-type CSPs operating within a D-VAT system answer this regulatory concern as no other system can.

Thus, developing countries have a context within which the D-VAT can be adopted, the large taxpayer group. They also have the opportunity to do so with present technology and certification standards. They also have the leverage to make this work, leverage provided by the convergence of global regulatory regimes around verifiable cash flow controls. Developing countries should take this opportunity to enhance VAT compliance, increase administrative efficiency and harmonize the VAT compliance obligations of their largest taxpayers. The D-VAT would bring a comprehensive vertical and horizontal VAT solution to developing countries that would facilitate economic integration with digital solutions in the major developed economies.