

# Trade Facilitation: A Review

by

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## **Abstract**

Trade facilitation is a concept that considers the simplification, harmonisation, standardisation and modernisation of trade procedures. Its principle aim is to reduce transaction costs in international trade, especially those between business and government actors at the national border. This review of trade facilitation is based on edited extracts from Andrew Grainger's PhD Thesis "Trade Facilitation and Supply Chain Management: a case study at the interface between business and government". The concept of trade facilitation has received unprecedented attention over the last few years, especially in the context of supply chain security, customs modernisation, international trade systems, WTO trade negotiations, capacity building and market access type questions. Although there is a large community of practitioners with a strong interest in trade facilitation type questions, any academic or other rigorous and published research remains surprisingly scarce. However, it is possible to draw on a reasonably well documented practitioner's literature.

This review focuses on trade facilitation at the interface between business and government in the cross-border movement of goods. It provides: an overview of key concepts and ideas; a short history of trade facilitation and its institutions at the international, regional and national policy levels; an overview of trade facilitation recommendations; and an analysis of relevant academic and other more rigorously researched papers. The review concludes that although a body of research is slowly evolving, it remains patchy. Much of the complexities and dynamics inherent in international trade have yet to be mapped out. While trade facilitation as a topic is prescriptive in nature, very little work by researchers or practitioners has been conducted on how to implement trade facilitations programmes or give consideration to its drivers and their underlying interests. The focus of the trade facilitation literature is very much grounded in a "systems" metaphor which considers day-to-day operations without looking at the wider institutional forces at work. For the literature and its recommendations to be of relevance it needs to consider wider institutional variables as well as consider the question of how to implement trade facilitation.

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## Trade Facilitation: A Review<sup>1</sup>

The concept of trade facilitation has received unprecedented attention over the last few years, not only in the context of supply chain security initiatives that followed terrorist attacks in the USA on 11 September 2001, but also in the context of wider trade and customs modernisation initiatives, the WTO Doha Development Round and “aid for trade” programmes. Recent trade policy programmes, security initiatives and published findings include the following:

- An avalanche of supply chain security related programmes and regulations that make reference to trade facilitation principles, including: the US-led CTPAT and CSI programmes (Browning 2003); the European Union’s Security Amendment to the Customs Code (648/2005/EC); the Swedish Stairsec programme (Tullverket 2006); the Canadian Partnership in Protection programme (Canada Border Service Agency 2006); the New Zealand Secure Export programme (New Zealand Customs Service 2003), the Australian Frontline programme (Australian Customs Service 2004); the ISO/PAS 28000 standard for supply chain security systems (Piersall and Williams 2006); the IMO’s security amendment to the SOLAS convention and the newly drafted ISPS code (IMO 2002; IMO 2003); various IATA initiatives including the *known shipper* concept (IATA 2006); and, the WCO’s framework of standards to secure and facilitate global trade (WCO 2005).
- €133 million spent by the European Commission on customs modernisation under the Customs 2007 programme and the proposed €324 million under the Customs 2013 programme. Both programmes are primarily driven by supply chain security and trade facilitation considerations (COM(2003)452 final; European Commission 2004; 2006a).

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<sup>1</sup> This review is based on edited extracts from Chapter 3 in Andrew Grainger’s PhD Thesis “Trade Facilitation and Supply Chain Management a case-study at the interface between business and government” (2007).

- An estimated potential for worldwide annual savings worth €300 billion by halving the cost of bureaucratic trade procedures (European Commission 2006b).
- The formal agreement by explicit consensus amongst WTO members to launch negotiations on trade facilitation (WTO 2004).
- An increase of expenditure by “aid for trade” donors on narrowly defined trade facilitation projects from \$101 million in 2001 to \$329 million in 2004 (WTO and OECD 2006);
- The commitment by the EU to spend €1 billion every year on “aid for trade” of which trade facilitation is a major component (European Commission 2005).
- An estimated \$3 billion spent on wider trade facilitation capacity building and technical assistance programmes in 2004 (OECD 2006b, p.8)<sup>2</sup>.

The term “trade facilitation” is largely used by institutions that seek to improve the regulatory interface between government bodies and traders at national borders. It is defined by the WTO as: “The simplification and harmonisation of international trade procedures” where trade procedures are the “activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade” (WTO 1998). Many trade facilitation proponents also make reference to the procedures applicable for making payments (e.g. via commercial banks). For example, UN/CEFACT defines trade facilitation as “the simplification, standardization and harmonisation of procedures and associated information flows required to move goods from seller to buyer and to make payment” (OECD 2001).

Although trade facilitation has gained considerable policy attention over the last few years, any university-based literature and similar literature that is based on more rigorous research methods remains meagre (a little over 50 relevant texts as will be summarised later). However, there is a reasonably

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<sup>2</sup> This figure excludes an estimated expenditure of \$15 billion by donors on related infrastructure developments.

well-established catalogue of international instruments and recommendations with an associated practitioners' literature. For example there are 792 reference documents listed in the GFP/UNTF database, produced exclusively by practitioners and policy makers, containing tools, recommendations, legislative instruments, reports, positions papers, commentaries as well as training and technical reference material (GFP/UNTF 2006). However, as this review will find, significant gaps remain in the literature. Much of the current focus is placed on prescriptive recommendations aimed at the improvement of the mechanics of the business-government interface at national borders without much consideration for the details relating to environmental complexity, drivers, their interests and wider institutional forces.

This review has a number of aims. Its principle one is to provide an introduction to trade facilitation as a topic. Guiding questions in this review are: What is trade facilitation? How has it come about? What are the key assumptions and arguments? What has already been researched? These questions are answered by providing an account of what trade facilitation is while drawing on internationally developed tools, recommendations and legislative instruments. The review then moves on to mapping out a history, highlighting trade facilitation activities in the international, regional and national domain. Following an overview of the emerging trade facilitation literature, this paper concludes with considerations of where gaps remain.

## **The International Trade Environment**

To set trade facilitation into context it is necessary to consider the international trade environment. Over the last few decades, the structure of production and business supply chains has become increasingly international. To a large degree this relates to the liberalisation in trade and finance, revolutionary developments in information and communication technology and transport systems (Henderson 1995; Grainger 2000b) as well as competition between firms that seek to take advantage of market liberalisation and business opportunities (Prahalad and Doz 1986). As a result production and its supply chains have become increasingly international in nature (Cooper 1993; Dicken 2003). This development (with the exception of the period 1980-85) is

reflected by the consistently large increases in the total value of global merchandise exports as presented in Table 1 using WTO data (WTO 2006e).

**Table 1. Growth in worldwide merchandise exports**

Time Period	Growth in merchandise exports by value
1950-55	53%
1955-60	36%
1960-65	46%
1965-70	67%
1970-75	176%
1975-80	131%
1980-85	-4%
1985-90	77%
1990-95	50%
1995-00	25%
2000-05	61%

Source: adapted from the WTO Trade Statistics Database (2006)

Despite this significant growth in international trade, its operations can be incredibly complex, involving many actors and operational steps. UN/CEFACT's International Trade and Business Processes Group 14 (TBG14) have identified more than 40 business and government actors, some of whom are summarised in Table 2 (Clark 2003). These, involve a wide range of commercial, transport, regulatory and financial procedures. While the work of TBG 14 identifies 8 regulatory authorities, many more can be found. For example in most developed countries, like the UK, it is easy to count 60 or more distinct regulatory procedures and regimes that impact on cross-border operations (Grainger 2007). These fall into the broader categories of revenue collection and fiscal protection, public safety and security, environment and health, consumer protection, and trade policy (Table 3)<sup>3</sup>.

<sup>3</sup> While the table was developed by me for my PhD thesis, I have also used it in my work at SITPRO and EUROPRO. Consequently it has found its way into a EUROPRO position paper (2004) and has been used for the Trade Facilitation entry in [www.wikipedia.org](http://www.wikipedia.org).

**Table 2. Actor Types**

<b>Actor Types</b>	<b>Possible Actors &amp; Roles</b>
<b>Customer</b>	Buyer Consignee Payor Importer
<b>Supplier</b>	Consignor Payee Seller Manufacturer Exporter
<b>Authority</b>	Chamber of Commerce Consular Customs Health Intervention Board (EU) Licensing Receiving Authority (Port Authority) Standards Institute
<b>Intermediary</b>	Bank / Financial Institution Broker Carrier Credit Checking Company Credit insurer Commission Agent Export Agent Freight forwarder Import Agent Insurer Inspection company Receiving authority

Source (Clark 2003, p.8)

**Table 3. Examples of international trade related regulatory activity**

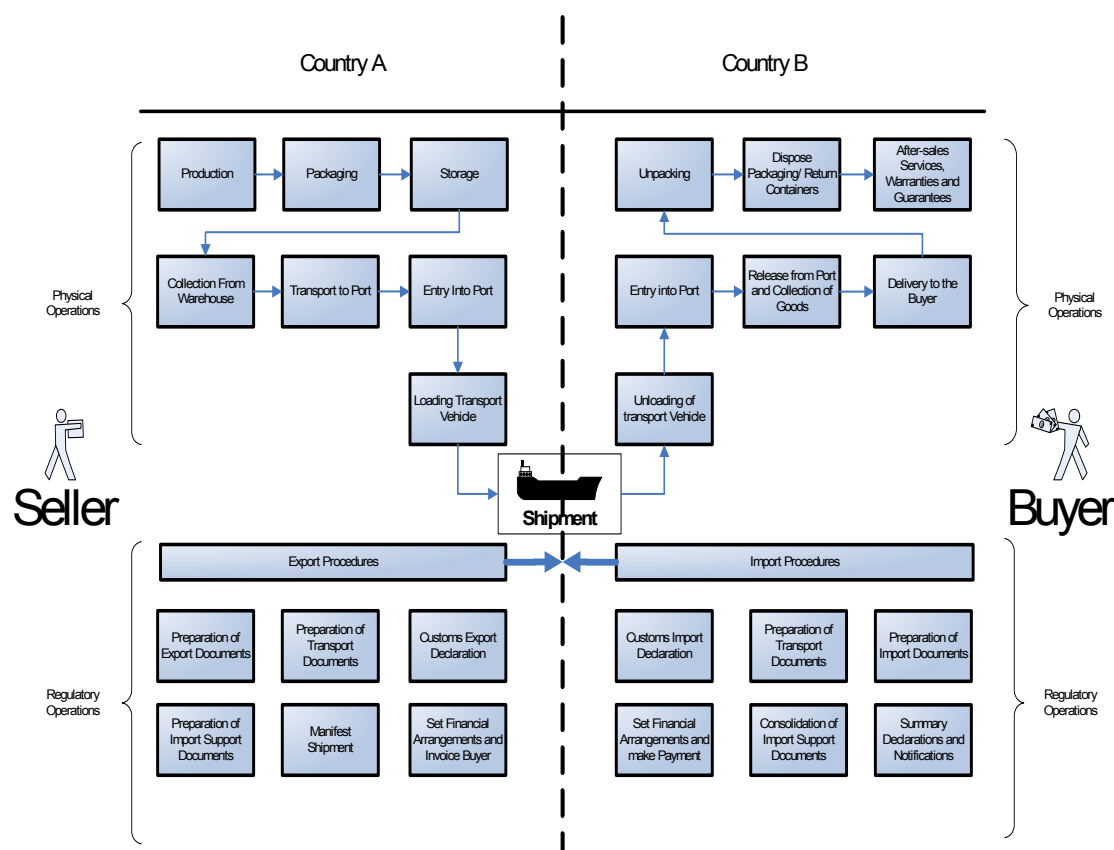
<b>Regulatory Category</b>	<b>Examples of related activity</b>
<b>Revenue Collections</b>	Collection of Customs duties, excise duties and other indirect taxes; payment of duties and fees; management of bonds and other financial securities
<b>Safety and Security</b>	Security and anti smuggling controls; dangerous goods; vehicle checks; immigration and visa formalities; export licences
<b>Environment and Health</b>	Phytosanitary, veterinary and hygiene controls; health and safety measures; CITES controls; ships' waste
<b>Consumer Protection</b>	Product testing; labelling; conformity checks with marketing standards (e.g. fruit and vegetables)
<b>Trade Policy</b>	Administration of Quota restrictions; CAP refunds

What underlies Table 2 and Table 3 is that in any given trade transaction a multiple of operational steps needs to be initiated, which involve many different actors complying with different sets of commercial and regulatory procedures – all accumulating transaction cost.

Figure 1 gives an illustration of the various operational steps that may be involved in moving goods between a seller and a buyer, and gives reference to export and import procedures to ensure goods clear the national border. Physical operations in country A may involve production, packaging, storage, warehousing, transport to the port, entry into the port, loading and shipment. Regulatory operations to enable export clearance, will most likely require the production, application and submission of: export documents; transport documents; export declarations; licences (necessary to enable import in country B); the shipping manifest; and financial arrangements. In the county of arrival, country B, physical operations are likely to involve unloading operations, entry into the port system, release from the port, delivery to the buyer, unpacking, deposal of packaging and after-sale services. Regulatory operations associated with import procedures are likely to involve the production, application and submission of: summary declarations and pre-notifications; import declarations; transport documentation; preparation and consolidation of supporting import documents; as well as compliance with financial arrangements for payment.

While in most countries the lead border agency is Customs, other government agencies include immigration, border guards, police, veterinarians, plant inspectors, food inspectors, trading standards bodies and safety agencies. Regulatory control by government actors may be multiplied by the number of countries through which goods are transited. Such a barrage of regulatory obligations is frequently described as a non-tariff barrier (UNECE 2003b; 2003a). Business actors often complain about excessive documentation requirements, lack of automation and use of information technology, lack of transparency in requirements and objectives, inadequate procedures and

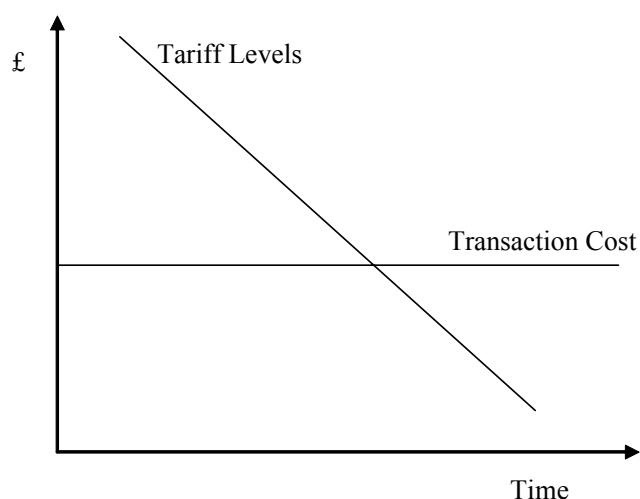
operating practices as well as lack of modernisation (Staples 1998; Grainger 2003). With falling trade tariffs, increasing availability of information technology, wider exposure to trade procedures through international production, time focused supply chain management (SCM) strategies, fiercer competition and the introduction of new security regimes, proponents of trade facilitation claim that businesses are becoming increasingly sensitive to trade-related transaction costs (e.g. Staples 1998; Grainger 2004).



**Figure 1. Business processes in a typical trade transaction**

Figure 2 helps provides an illustration of this. Over the last few decades customs tariffs have been significantly reduced. For example, following the conclusion of the Uruguay Round (taking effect from 1 January 1995) the average tariff level for industrial products has fallen from 6.3% to 3.8%. Similarly, the value of imported industrial products that receive duty-free treatment in developed countries has risen to 44%; and, the proportion of

imports into developed countries from all sources facing tariffs rates of more than 15% is now only 5% (WTO 2006b). Consequently, the gap between tariff duties and transaction costs has narrowed; many practitioners would argue that in view of such low trade tariffs, the transaction cost associated with paying duties is actually higher than the duties themselves.



**Figure 2. Tariffs/Transaction Cost**

As so many parties in business and government have a stake in controlling and moving goods, one of the main challenges of trade facilitation is to simplify procedures and to ensure that the interface between business and government is managed without excessive transaction costs. In effect such transaction costs constitute a rent on international trade and diminish the economic benefits of trade liberalisation. Business costs may be a direct function of collecting information and submitting declarations or an indirect consequence of border checks, in the form of delays and associated time penalties, forgone business opportunities and reduced competitiveness (OECD 2001; 2003). Trade facilitation seeks to rectify these problems.

### **Defining Trade Facilitation**

Trade facilitation looks at how procedures and controls governing the movement of goods across national borders can be improved to reduce associated cost burdens and maximise efficiency while safeguarding legitimate regulatory objectives. By introducing the term at the onset of this review, much has already been given away. Brief reference to the WTO has

already been made, who define the term trade facilitation as: “The simplification and harmonisation of international trade procedures” where trade procedures are the “activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade” (WTO 1998).

While the WTO definition carries significant authority in trade negotiations, there is no one official definition. For example, UN/CEFACT defines trade facilitation as “the simplification, standardization and harmonisation of procedures and associated information flows required to move goods from seller to buyer and to make payment” (OECD 2001). By emphasising payment procedures, international financial institutions are introduced as a distinct and separate party. However, the research that led to the draft of this working paper focused exclusively on the interface between business and government (Grainger 2007). Subsequently, this review does not account for procedures owned and operated by financial institutions<sup>4</sup>. Similarly, this review also ignores more literal interpretations of the term trade facilitation, which Brian Stables (1998) implies are occasionally (in his view, mistakenly) extended to mean the improvement of transport infrastructure, removal of government corruption, reduction of customs tariffs, removal of inverted tariffs, resolution of non-tariff trade barriers, export marketing and export promotion.

Common to all definitions of trade facilitation is the desire to improve the trade environment and reduce or eliminate any transaction cost between business and government. In its Recommendation No 4 UNECE (UN/CEFACT 1974) is quite explicit on the reformatory trade facilitation objectives, stating that the trade facilitation programme ought to be guided by the “... simplification, harmonization and standardisation [of trade procedures] so that transactions become easier, quicker and more economical than before ...”. Simplification is “... the process of eliminating all unnecessary elements and duplications in formalities, process and procedures ...; harmonization is the alignment of national formalities, procedures, operations and documents with international

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<sup>4</sup> The commercial procedure in international trade is an area that is very poorly researched, too.

conventions, standards and practices; [and] standardization is ... the process of developing internationally agreed formats for practices and procedures, documents and information.” Implied in this statement is also the modernisation of cross-border operations through use of information and communication technologies that rely on standardised and harmonised data. As such, trade facilitation is at once a political, economic, business, administrative, technical and technological issue (Butterly 2003).

To help the wider adoption of the four trade facilitation principles: the simplifying, standardising, harmonising and modernising of international trade procedures, a number of international, regional and national organisations have drafted a wide range of trade facilitation recommendations and instruments (e.g. UN/CEFACT and UNCTAD 2002). Broadly, they focus on promoting best practices, improved business-government cooperation, the adoption of technical standards and harmonised trade and customs procedures. A detailed review is provided later in this review.

To a large degree trade facilitation can be viewed as an extension of the efforts of trade liberalisation. Its focus and programme prescriptions are very much centred on the more operational issues in the day-to-day movement of goods across borders and the interface between business and government. As history shows, trade facilitation is not a new phenomenon and a number of trade facilitation initiatives have become firmly established within the international trade regime. What is new is the unprecedented attention over the last few years, stemming from WTO’s Doha Trade Round discussions and “aid for trade” initiatives (Beattie 2006; WTO and OECD 2006) as well as the avalanche of recent supply chain security focused regulations (e.g. IMO 2002; Browning 2003; IMO 2003; New Zealand Customs Service 2003; Australian Customs Service 2004; WCO 2005; Canada Border Service Agency 2006; IATA 2006; Piersall and Williams 2006; Tullverket 2006). By contrast, the trade facilitation literature is still just evolving and much of the topic remains unexplored. Most of the defining work is held in the form of internationally developed tools, recommendations and legislative instruments. These are occasionally supported by reports, positions papers, commentaries, training

and reference material produced by proponents of trade facilitation<sup>5</sup> or, where undocumented, voiced by the day-to-day frustrations of practitioners operating at the border.

## **Trade Facilitation Bodies and their History**

As established earlier, trade facilitation looks at the operational aspects of international trade and seeks to improve the interface between business and government. As such, any history of trade facilitation is inevitably linked to the history of trade liberalisation. Some of the key bodies involved in promoting trade facilitation, like the WTO and UN/ECE with its various working groups, have already been introduced. However, there are many more international, regional and national organisations that take an interest in developing this area. For example, much of the more formalised research in trade facilitation has been initiated by the OECD and the staff working for the World Bank (e.g. Henson, Loader et al. 1999; OECD 2001; 2003; Wilson, Mann et al. 2003b; Wilson, Mann et al. 2004), while funding for trade facilitation programmes comes from various public and private coffers, some of which are not insubstantial (European Commission 2005; OECD 2006b). All these bodies have legacies dating back to wider Allied Forces' reconstruction efforts in the post World War II period and the Bretton Woods agenda to secure security through international cooperation.

Earlier histories of trade liberalisation and attempts to improve cross-border operations can of course be found. For example, many medieval European market towns keep on display – usually near the city gates – the standard weights and measures that were applicable to trade on their market squares. Trade agreements have taken place since the beginning of western civilisation. Carthage had a trade treaty with Rome in 509BC (Mann 1986, p.251) and trade from boats around the Mediterranean can be dated back to around 7000BC (Curtin 1984, p.124). However, it is the Bretton Woods agenda and its institutions that predominantly define today's global economic environment (Stubbs and Underhill 1994). Through the adoption of

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<sup>5</sup> For example, the Global Facilitation Partnership for Trade and Transport lists 792 such documents (GFP/UNTF 2006).

international instruments and working with their institutions, our current international trade regime consists of various regulatory layers set at international, regional and national levels. These tend to involve organisations of states (e.g. WTO, UN bodies, OECD, UNCTAD), sovereign states and numerous interest groups - e.g. NGOs, business associations, epistemic communities and individuals (Braithwaite and Drahos 2000, pp.194-206). To help map out the governing institutions and their specific efforts in trade facilitation, it is best to start with the international level and then move down to the national level. An accompanying chronology of key events is provided (Table 4).

## **International Level**

### **The World Trade Organisation (WTO)**

One of the key international institutions governing the liberalisation of trade is the WTO and its predecessor the GATT. The GATT came to life in 1947 as a temporary substitute for the International Trade Organisation, which was proposed under the Bretton Woods Agreement in 1944 but failed to come to life following US Congress' failure to ratify it. The GATT's overall objective was to prevent a repetition of the protectionist and discriminatory trade policies of the 1930s that are frequently seen as a significant contributory factor to the outbreak of World War II (Stubbs and Underhill 1994, pp.153-157; Appling and Archer 1998; Braithwaite and Drahos 2000, p.175). The GATT's purpose, as defined in the preamble to its Charter, is to promote economic well being by enabling its members to enter into "reciprocal and mutually advantageous arrangements" aimed at the "substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment" in international trade (GATT 1947).

**Table 4. Key Trade Facilitation Events and Initiatives**

1944	Bretton Woods Agreement, establishment of the World Bank, IMIF and International Trade Organisation	1994	The Customs Co-operation Council reconstitutes itself as the World Customs Organisation
1947	The GATT comes to life	1994	The European Union enforces a common Customs Code
1947	The Committee for European Economic Co-operation (which was established to help implement the Marshall Plan) agrees to set up a study group examining the possibility of establishing one or more inter-European Customs Unions based on the principles of the GATT	1995	GATT becomes permanently established as the World Trade Organisation
1947	UN's Economic and Social Council sets up the UNECE as one of the five UN regional commissions	1995	USA commences work on implementing its International Trade Data System
1948	The study group of the Committee for European Economic Co-operation sets up two committees: an Economic Committee (later to become the OECD) and a Customs Committee	1996	WTO ministerial meeting in Singapore sets trade facilitation, together with transparency in government procurement as well as investment and competition policy, as new topics for discussion within the WTO
1951	European Coal and Steel Community is established	1996	UNECE Working Party No. 4 is reconstituted as the UN/CEFACT committee
1952	The Committee for European Economic Co-operation's Customs Committee becomes the Customs Co-operation Council	1999	To accommodate a wider trade facilitation programme for customs administrations, the Kyoto Convention is reviewed but has insufficient signatories to bring it into force
1957	Treaty of Rome, European Coal and Steel Community becomes the European Economic Community	2001	"Singapore Issues" are adopted by the WTO Doha development round
1959	The Customs Co-operation Council's Convention on the Nomenclature for the Classification of Goods in Customs Tariffs comes into force	2001	September 11 sees terrorist activity in New York bring down the Twin Towers. USA develops proposals for supply chain security, including the unilateral Container Security and the Customs Trade Partnership Against Terrorism
1960	UNECE forms Working Party Number 4 for the facilitation of international trade procedures and begins to draft trade facilitation recommendations	2002	ASEAN Free Trade Area is effectively in place and includes some elements of customs harmonisation
1974	The Customs Co-operation Council's Kyoto Convention, seeking to harmonise customs procedures comes into force.	2002	The IMO revise their Port (2003) and Safety (2002) Conventions to include security provisions
1974	UN publishes CEFACT Recommendation Number 4, recommending the establishment of national trade facilitation committees (PRO committees)	2003	Cancun Ministerial Conference decides to drop the Singapore Issues but views trade facilitation favourably
1976	ASEAN adopt an economic agenda, including preferential trade options and the vision for a free trade area	2003	EU Commission prepares a vision for a paperless trade and Customs environment for implementation in the EU by 2010-12
Since 1980	Revolutionary developments in communication and information technology; recognition that technology can be harnessed to improve trade procedures	2004	WTO General Council decides by explicit consensus to commence negotiations on trade facilitation within the framework of GATT Articles V, VIII and X
1987	The European Economic Community agree to a common external customs tariff	2004	EU enlargement by 10 new members has secured the number of signatories required to bring the revised Kyoto Convention into force
1988	The Customs Co-operation Council's International Convention on the Harmonized Commodity Description and Coding System comes into force	2005	WCO adopts a framework of standards to secure and facilitate trade
1989	Singapore puts Trade Net in place	2005	The EU revises customs legislation to include security provisions; implementation is scheduled for 2009
1992	Treaty of Maastricht is signed; the European Economic Community becomes the European Union	2006	Revised Kyoto Customs Convention is adopted
1992	USA, Canada and Mexico form the North American Free Trade Area (NAFTA), which includes elements of customs harmonisation	2006	The WTO Doha trade round is suspended, though hopes for a trade facilitation agreement remain high
		2006	The ISO develop the 28000 family of standards for secure supply chains

Originally founded with 23 member states, the GATT managed to attract a membership of 117 states by the end of the Uruguay Round in 1994. Following on from the Uruguay Round, members agreed to set up the more permanent WTO with its own secretariat. The WTO came to life on the 1st January 1995 and now has 149<sup>6</sup> members. As outlined earlier, average tariff levels for industrial products have fallen to 3.8% since its establishment (WTO 2006b). Not surprisingly, as tariff rates fall, trade negotiators are increasingly taking an interest in the non-tariff areas. Consequently, at the 1996 WTO ministerial meeting in Singapore, trade facilitation with transparency in government procurement as well as investment and competition policy was introduced as a new agenda item. In November 2001 these “Singapore Issues” were adopted formally as part of the Doha development agenda. However, at the later ministerial meeting in Cancun in 2003, the Singapore Issues, discussed as one package with four elements, faced considerable criticism, especially by developing countries. In the follow-up discussions it was agreed to drop competition policy and investment and transparency in government procurement, but to keep trade facilitation, which received broad support. So, on 1st August 2004 the WTO’s General Council decided, by explicit consensus, to commence negotiations on trade facilitation and the first meeting of the negotiations group took place on 15th November 2004 (European Commission 2006b; WTO 2006c). The trade facilitation negotiations are focusing, initially, on Articles V, VIII and X of the GATT 1994, covering Freedom of Transit, Fees and Formalities, and Publication and Administration of Trade Regulations (GATT 1994).

Although the Doha Trade Round negotiations were suspended in July 2006 over unresolved questions on the commitment to market access, especially in the agricultural area (WTO 2006a), there remained significant consensus in the area of trade facilitation (Mandelson 2006; WTO 2006d). Informal noise made by negotiators suggests that negotiations in the area of trade facilitation

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<sup>6</sup> As listed on the WTO website, dated 11 December 2005 (see [http://www.wto.org/English/thewto\\_e/whatis\\_e/tif\\_e/org6\\_e.htm](http://www.wto.org/English/thewto_e/whatis_e/tif_e/org6_e.htm) )

will continue, especially where linked to wider capacity building programmes (e.g. WTO and OECD 2006). With an estimated worldwide annual saving of €300 billion – if the cost of bureaucratic trade procedures were cut in half (European Commission 2006b) – spending by international donors on “aid for trade” in narrowly defined trade facilitation projects has gone up from \$101 million in 2001 to \$329 million in 2004 (OECD 2006b).

### **The World Customs Organisation (WCO)**

While trade tariffs fall under the remit of trade negotiators (e.g. within the framework of WTO instruments), the collection of duties and administration of tariff measures is governed by customs procedures. These, too, are bound in the majority of cases by international arrangements. While the WTO serves as an international organisation for multilateral trade agreements, the World Customs Organisation “... maintains, supports and promotes international instruments for the harmonization and uniform application of simplified and effective customs systems and procedures” (WCO 2002). Given the lead role that Customs have in controlling national borders, their representing international body, the World Customs Organisation, plays a prominent role in trade facilitation.

The origin of the WCO dates back to 1947 – the same year in which the GATT was created – when the 13 European governments represented in the Committee for European Economic Co-operation (CEEC)<sup>7</sup> agreed to set up a study group examining the possibility of establishing one or more inter-European Customs Unions based on the principles of the GATT. In 1948, the study group set up two committees: an Economic Committee and a Customs Committee. The Economic Committee eventually evolved into the Organization for Economic Co-operation and Development (OECD), while in 1952 the Customs Committee became the Customs Co-operation Council (CCC), with 17 founding members, all of them European. With increasing membership from outside Europe, the CCC was renamed the World Customs

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<sup>7</sup> The CEEC was a body established with US and Canadian aid to help with the implementation of the Marshall Plan and the reconstruction of Europe.

Organisation (WCO) in 1994. Today the WCO represents 169 customs administrations (WCO 2002; OECD 2006a).

Although the WCO's main purpose is to aid the cooperation between customs administrations, many of its instruments and recommendations are tied into wider international agreements. The WCO committees are therefore able to exercise considerable influence over the mechanics of trade and customs procedures amongst its member countries, including the scope for trade facilitation. The most noteworthy instruments are the Kyoto Convention for Harmonising Customs Procedures and the WCO's Harmonized Commodity Description and Coding System (HS) for tariff classification. The Kyoto Convention first came into force in 1974, followed by the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures (WCO 1999), which was adopted on 6<sup>th</sup> February 2006 (WCO 2006c). Building on an earlier CCC classification convention from 1959, the Harmonized Commodity Description and Coding System came into force in 1988, following the official signing in 1983 and registration with the UN (WCO 2006a). In close cooperation with the WTO, the WCO is also active in ensuring consistency in the technical interpretation of valuation rules under GATT Article VII (GATT 1994) and non-preferential origin rules<sup>8</sup> under the WTO Agreement on Rules of Origin agreed at the Uruguay Round in 1994 (WCO 2002). More recently, on 23 June 2005, the WCO also adopted its Framework of Standards to Secure and Facilitate Global Trade (WCO 2005), which includes an explicit commitment to the principles of trade facilitation. Together these WCO instruments significantly define the operational aspects of customs and trade procedures in the majority of trading nations.

#### **The United Nations Economic Committee for Europe (UNECE)**

Unlike the WTO or the WCO, the activities of UNECE do not relate to any international legal instruments. However, much of UNECE's work may be unilaterally adopted by nation states or through regional agreements and trading blocs. Thus, UNECE is widely recognised as the global focal point for

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<sup>8</sup> These are the rules used to determine the origin of goods and are of particular significance to the application of trade policy instruments, e.g. anti-dumping duties, tariff quotas and surveillance measures.

trade facilitation recommendations, standards and specifications. It, too, was formed in 1947 and one of its primary goals is to encourage greater economic cooperation among its 55 European member states. However, in the area of trade facilitation, UNECE has taken on a global remit on behalf of the entire UN through its Centre for Trade Facilitation and Electronic Business (UN/CEFACT). UN/CEFACT was brought to life in 1996, replacing the UNECE Working party No 4 which was formed in 1960 for the facilitation of international trade procedures. UN/CEFACT now serves as a forum to develop, initiate and consolidate work by other international organisations (e.g. WTO, WCO, OECD, UNCTAD and ISO). In this capacity it looks after 33 trade facilitation recommendation and range of electronic business standards and technical specifications (UN/CEFACT 2005; UNECE 2005). As such it owns and manages various document and electronic messaging standards used in international trade transactions, including the UNeDocs and EDIFACT standards (UNECE 2006c).

The UNECE is also active in other areas of trade facilitation. For example, its Working Party 7 has responsibilities for agricultural quality standardisation enforced in many countries by dedicated horticulture and marketing inspectors (UNECE 2006d). With the International Road Transport Union (IRU), it runs the TIR Convention of 1975 (TIR 2005), offering a significantly simplified customs control regime for road vehicles in transit through third countries. Together with various international transport bodies, UNECE also helps set international standards for the transport, marking, packaging and handling of dangerous goods (UNECE 2006a).

#### **Other International Bodies**

There are a number of other international bodies that concern themselves with trade facilitation issues. Most recently this includes the International Standards Organisation (ISO), which has developed its ISO/PAS 28000 family of best practice guidelines for implementing supply chain security (Piersall and Williams 2006). But there are many others, including the International Maritime Organisation (IMO), the International Chamber of Shipping (ICS), the International Road Transport Union (IRU), the International Civil Aviation

Organisation (ICAO) and the International Chamber of Commerce (ICC). To give a few examples of their powers, the IMO maintains the Convention to Facilitate Maritime Transport (IMO 1998), the Safety of Life at Sea Convention (IMO 2002) and the International Ship and Port Facility Security Code (IMO 2003). The ICAO sets international standards and practices through its Convention on International Civil Aviation, which in its Annex 9 includes trade facilitation (ICAO 2002). The ICC has standardised recommended trading terms between buyers and sellers with its Incoterms (ICC 1999) and it also governs the rules for letters of credit (ICC 1993). There are many other examples, helpfully summarised in the UNECE's and UNCTAD's "Compendium of Trade Facilitation Recommendations" (2002).

Bodies and organisations that have an interest in international development and capacity building also play an important role in shaping the international trade regime. For instance, the World Bank maintains an active transport and trade facilitation programme, lending financial resources and intellectual contributions to international trade facilitation initiatives (World Bank 2006). A similar role is played by UNCTAD (UNCTAD 2006), who have also developed ASYCUDA – a free electronic customs platform used by many countries, especially with emerging and developing economies (ASYCUDA 2006). At a more regional level, the activities of these international organisations are mirrored by organisations such as APEC (APEC 2006) and the UN's Economic and Social Division for Asia and the Pacific (UN ESCAP 2004). A global network of practitioners and policy-makers is maintained by the Global Facilitation Network for Transport and Trade and the United Nations Trade Facilitation Network of Partners (GFP/UNTF 2006).

### **Regional and Bilateral Level**

In addition to negotiation through multilateral trade instruments like the GATT, trade liberalisation and facilitation is sought through the establishment of free trade areas. There are different qualities to the degree of regional integration. Undoubtedly the European Union (EU) is one of the most advanced with a fully functioning Customs Union that now has 27 member states. The EU has its roots in the European Coal and Steel Community (ECSC), which was

established in 1951. Following the signing of the Treaty of Rome in 1957, the ECSC became the European Economic Community (EEC) – which was then reconstituted through the Treaty of Maastricht in 1992 into the European Union (EU). As such the EU shares common customs legislation as well as a common external tariff. This means that most goods within the Union can move freely, effectively removing much of the regulatory transaction costs associated with crossing its internal borders. Its key instruments are the common Customs Community Code (2913/92/EEC) and its implementing provisions (2454/93/EEC) as well as the Tariff Regulation (2658/87/EEC). Although legislation is identical across the European Union, the enforcement and management of customs procedures may still vary between member state customs administrations. To encourage greater interoperability between administrations, the European Commission and Council are initiating an extensive reform programme that includes new security measures (648/2005/EC) and extensive provisions for the electronic integration between member state administrations by 2012-14 (COM(2003) 452 final; Grainger 2004). Outside the area of customs many legislative differences remain between member states. While member states frequently agree on common guiding directives, their application can vary significantly – especially in areas like VAT and excise, veterinary controls and on matters of national security.

Of course there are many other regional groupings, although they have not quite managed to reduce the operational impact of internal borders to quite the same extent as the EU. Nevertheless, they do frequently include provisions to facilitate trade by harmonising and standardising trade procedures and the administration of border controls. Examples of such formations include the European Free Trade Associations (EFTA), the North American Free Trade Agreement (NAFTA), the Association of Southeast Asian Nations (ASEAN), Mercosur in Latin America, and the Common Market for Eastern and Southern Africa (COMESA). There are many more regional trade agreements. In September 2005 a total of 183 WTO-registered regional agreements were in force (WTO 2005).

Regional trade agreements can bring consistency to regulations and procedures between trading countries – something that proponents of trade facilitation tend to support. Annexes to trade agreements can include specification on such practical issues as shared procedures for checking vehicle weights, use of common IT systems, documentation and messaging standards, mutual recognition of official controls, licences and certificates. However, many agreements are also annexed by very specific origin rules and other tariff measures. The resulting variance between regional agreements is often described as being too complex for the casual or occasional trader. Jagdish Bhagwati (e.g. 1998; 2005) prominently describes the resulting mess of preferential arrangements as a “spaghetti bowl”, based on an illustration showing the many overlaps of regional arrangements.

### **National Initiatives**

At a national level trade facilitation can be seen as a vehicle to fully exploit the benefits of lower tariff levels and to take advantage of international market opportunities, as well as to attract foreign direct investment with as little red tape as possible. Many of the recommendations and principles propagated by international institutions have been developed initially by individual nation states, feeding their experiences and ideas into the negotiations of regional and international bodies. Probably not surprisingly, one of UNECE’s key trade facilitation recommendations, dating back to the early 1970s, is for nations to set up national trade facilitation committees to interface between government and business interests to improve trade procedures in the cross-border environment – so called “PRO” committees (UN/CEFACT 1974). UNECE lists contact details for 48 such national PRO organisations (UNECE 2006b).

Despite international efforts, the implementation of recommendations is likely to be varied. Again, the Global Facilitation Network for Transport and Trade details several hundred records of national experiences (GFP/UNTF 2006). Noteworthy is that trading nations such as Singapore, Korea, Australia, New Zealand are often perceived by practitioners to be especially innovative in making the trade facilitation agenda their own. A particularly inspiring national initiative includes Singapore’s “single window” TradeNet system, which

electronically links up all trade procedures and government departments into one system (Applegate, Neo et al. 1993; Applegate, Neo et al. 1995; Teo, Tan et al. 1997). Similar systems are now proposed for the whole of the EU (COM(2003)452 final) and are being developed or put into place in countries as varied as the USA, Ghana, Korea, Malaysia, Senegal, Mauritius and Tunisia (UNECE 2003b; 2003a; UN/CEFACT 2004; Wulf 2004).

Similarly, where hegemonic powers are present, unilateral measures can be quite influential in shaping international debate. For instance, since the terrorist attacks on the USA on 11 September 2001, American security measures – such as the Container Security Initiatives (CSI) and the Customs and Trade Partnership Against Terrorism (CTPAT) (Browning 2003) – have contributed significantly to shaping and accelerating debate on security and trade facilitation in international institutions like the WCO (e.g. IMO 2003; WCO 2005; Piersall and Williams 2006) as well as in other regional groups and nation states (e.g. New Zealand Customs Service 2003; Australian Customs Service 2004; 648/2005/EC 2005).

### **Trade Facilitation Recommendations**

A review of trade facilitation is not complete without at least some consideration of the guiding principles and recommendations. To recap, this paper has already made extensive reference to the principles that are derived from the various trade facilitation definitions: the simplifications, harmonisation, standardisation and modernisation of trade procedures. By looking at international, regional and national bodies with an active interest in trade facilitation, this paper has shown that trade facilitation is closely linked to the wider international trade regime and concerns itself with the more operational aspects of moving goods. While trade facilitation is not a new concept, it has received considerable attention in the context of the WTO Doha Trade Round discussions and numerous supply chain security initiatives.

Against this backdrop there are three options for reviewing trade facilitation principles and recommendations. The first option is to catalogue all

recommendations and instruments that have been published and consider their scope for trade facilitation. The second option is to consider the underlying ideas and concepts that are receiving particular attention in the face of recent policy momentum towards greater trade facilitation. The third option is to take a personal practitioner's account that highlights those ideas and concepts under consideration, which are not immediately transparent when examining public documents. Fortunately, most of the work to meet the first option has been completed by the UNECE and UNCTAD (2002), who have produced a comprehensive compendium. In their compendium they list nine international conventions and uncover some of the areas set by trade facilitation recommendations. These are summarised in Table 5.

**Table 5. Scope covered by international trade facilitation recommendations**

<p><b>International trade facilitation recommendations cover:</b></p> <ul style="list-style-type: none"><li>• Trade procedures</li><li>• Customs and regulatory bodies</li><li>• Provisions for official control procedures applicable to import, export and transit including: general arrangements, customs controls, official documentation, health and safety, financial securities, and transshipment</li><li>• Provisions relating to transport and transport equipment, including: air transport; sea transport; and multimodal transport</li><li>• Provisions relating to the movement of persons</li><li>• Provisions relating to the management of dangerous goods</li><li>• Provisions relating to payment procedures</li><li>• Provisions relating to the use of information and communication technologies</li><li>• Provisions relating to the commercial practices and the use of international standards</li><li>• Legal aspects of trade facilitation</li></ul> <p style="text-align: right;">(UN/CEFACT and UNCTAD 2002)</p>
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Thanks to the comprehensive work of the UNECE and UNCTAD (2002) it is now possible to move straight on to the second review option, which considers the underlying ideas that have shaped many of these recommendations. For instance, in WTO Doha Trade Round discussion

covering the freedoms of transit, fees and formalities as well as the publications and administration of trade regulations (GATT 1947; 1994: Articles V, VIII and X), common themes as suggested by the WCO are: provisions for advance rulings; provisions for appeal procedures; the Single Window concept; use of risk management and post clearance controls; and the use of simplified procedures for suitably authorized persons (WCO 2006b). When looking at official communications to the WTO (e.g. WTO 2002a; 2002b; 2002c), it is possible to be even more explicit. See Table 6.

**Table 6. WCO Trade Facilitation Recommendations under GATT Articles V, VIII and X**

<p><b>Trade facilitation recommendations under Article V:</b></p> <ul style="list-style-type: none"><li>• to accept commercial documents (e.g. invoice and transport documents) instead of mandating formal regulatory declarations</li><li>• set simple and clear procedures for identifying consignments</li><li>• ensure non-discrimination of goods</li><li>• use of international agreements; and, a commitment to regulatory cooperation</li></ul> <p><b>Additional trade facilitation recommendation under Article VIII:</b></p> <ul style="list-style-type: none"><li>• regulatory fees ought not exceed expenses</li><li>• standardisation and simplification of customs and trade documents</li><li>• coordinated intervention and convergence of regulatory controls</li><li>• simplification of governing trade procedures</li><li>• the Single Window concept</li><li>• use of risk management techniques</li><li>• use of information technology</li><li>• common data models</li><li>• time guidelines for border clearance</li><li>• adherence to international customs conventions</li></ul> <p><b>Additional trade facilitation recommendation under Article X:</b></p> <ul style="list-style-type: none"><li>• accessible publication of procedures and requirements</li><li>• active provision of information</li><li>• procedures for advance and binding rulings</li><li>• fair and efficient appeal and tribunal procedures</li><li>• use of memoranda of understanding between regulatory bodies and traders</li></ul> <p>(Sources: WTO 2002a; 2002b; 2002c)</p>
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Similar themes can also be identified in trade facilitation and security discussions where common additional regulatory objectives are: the

introduction of advance notification requirements; more targeted controls; the use of new technologies in physical inspections (e.g. scanners) and reporting (IT systems); and the ability to access to information generated up and down the supply chain. Trade facilitation recommendations considered by regulators to offset these additional burdens are equally extensive (e.g. Browning 2003; Grainger 2004; 648/2005/EC; Grainger 2006) and are summarised in Table 7.

**Table 7. Trade facilitation focused initiatives in supply chain security**

**Generic themes in security and trade facilitation focused initiatives:**

- use of risk management techniques
- development of partnership programmes
- preferential treatment of authorised firms and individuals
- standardisation of data requirements
- cooperation and mutual recognition of controls between agencies and governments
- replacement of paper documents with the use of electronic reporting systems

(source: Grainger 2006)

The third review option, which considers the trade facilitation practitioner's viewpoint, allows the underlying concepts and ideas to be looked at in greater detail and provides a few illustrative examples. The examples cited in this paper are based on observations made as a proponent of trade facilitation while working for SITRPO and EUROPRO between January 2002 and March 2006.

Broadly, two categories of trade facilitation concepts can be identified: "better regulation" and "use of information and communication technology" (COM(2003)452 final; Grainger 2003). While the former looks at improving trade procedures from a regulatory point of view, the latter looks at using technology to reduce trade related transaction costs. In total 18 broad concepts can be catalogued that appear to be in the back of the minds of the proponents of trade facilitation. These are summarised in Table 8 and detailed with illustrations over the next few paragraphs.

**Table 8. Trade Facilitation Concepts: a practitioner's observation**

<p><b>Better regulation:</b></p> <ol style="list-style-type: none"><li>1. Simple rules and procedures</li><li>2. Avoidance of duplication</li><li>3. Memoranda of Understanding (MoUs)</li><li>4. Alignment of procedures and adherence to international conventions</li><li>5. Trade consultation</li><li>6. Transparent and operable rules and procedures</li><li>7. Accommodation of business practices</li><li>8. Operational flexibility</li><li>9. Customer-service provisions for government administrations</li><li>10. Mechanisms for corrections and appeals</li><li>11. Fair and consistent enforcement</li><li>12. Proportionality of legislation and control to risk</li><li>13. Time-release measures</li><li>14. Risk management and trader authorisations</li></ol> <p><b>Information and communication technology:</b></p> <ol style="list-style-type: none"><li>15. Standardisation of documents and electronic data requirements</li><li>16. Automation</li><li>17. Single Window</li><li>18. International electronic exchange of trade data</li></ol> <p style="text-align: right;">(Source: practitioner observations)</p>
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### **1. Simple rules and procedures**

The core argument here is that if rules and procedures are kept simple, their administration and compliance should correspondingly require less effort and less costs. The cross-border environment with its rules, procedures and institutions is complex. By contrast, the pursuit of simpler rules and procedures is seen by many proponents of trade facilitation as a means to creating an environment in which transaction cost problems do not carry the same scale as they currently do. Simpler rules and procedures are also seen as a means to ensuring tighter and more efficient controls.

### **2. Avoidance of duplication**

The aim here is to avoid duplication of controls and procedures. Given the many regulatory bodies with an interest in controls (see Table 3) it requires extensive efforts in coordination to define control regimes and their administration. This aim also includes the objective of mutual recognition of controls among two or more governments. For the proponent of trade

facilitation, one of the visions is the recognition of export controls in lieu of import controls. Another variant of this objective is for regulatory bodies to recognise a businesses' own control measures (e.g. for audit, finance of quality purposes) in lieu of controls and inspections enforced by government executive agencies.

### **3. Memoranda of Understanding (MoUs)**

MoUs between business and government parties and among executive agencies (e.g. customs and veterinarians) or governments, help clarify the control objectives and can also be used as instruments to guide cooperation. They often offer greater flexibility and are therefore more accommodating of dynamic operational needs. Also, they can provide very cost-effective alternatives when compared to the effort required for defining and implementing new regulation.

### **4. Alignment of procedures and adherence to international conventions**

Essentially this is about bringing consistency in trade procedures as enforced by individual states and regions. The more aligned these are, the less traders need to duplicate effort in developing capabilities, systems and compliance procedures. One of the key international instruments is the Kyoto Customs Convention (WCO 1999). However, where a common regulatory framework is not agreed upon, an alternative model is for governments to formally recognise the control objectives of their trading partners. Where governments are satisfied that the institutions of their trading partners meet their regulatory objectives, even if they use different procedures and methods, there is no need for them to duplicate controls (OECD 1994).

### **5. Trade consultation**

It is unlikely that legislators have full knowledge of commercial and operational practices. Most proponents of trade facilitation therefore argue that for legislation to be drafted in a way in which its objectives are met with the least impact on operations and cost, extensive consultation efforts with traders are a necessary prerequisite (e.g. through user and policy groups or national PRO committees).

## **6. Transparent and operable rules and procedures**

Governing rules and procedures are often perceived to be poorly or ambiguously drafted, adding cost and causing confusion. For example, key definitions such as “consignment” and “shipment” in EU veterinary and plant health legislation do not match general commercial practices (e.g. see Lacors 2003, p.5). Occasionally, rules and procedures may not even be implemented in any practical manner, placing costly obligations on parties who are unable to meet them. For example under the UK’s Anti Terrorism Act (2000) and its Information Order (2002) it is theoretically possible for Government executive agencies to ask shipping lines and their agents to provide specific cargo related information to which they have no access<sup>9</sup>. Similarly, IT systems can place considerable development requirements on businesses, requiring adequate lead-times. Where requirements have been communicated too late or are not clearly defined and documented, implementation and transaction costs are likely to be very high. Consequently, proponents of trade facilitation will make a strong case for any new proposals, policies and regulations to be pre-notified at the earliest possible stage.

## **7. Accommodation of business practices**

There are many variants on this theme, but in principle it hinges on businesses’ desire for regulatory controls and procedures to fit their operational requirements. One of the most significant aspects of this theme includes ideas revolving around inland clearance – allowing goods to move outside the port to facilities where checks and controls can be conducted more cost-effectively as, for example, when unloading containers and vehicles at the trader’s premises. Other themes look at the use of open information standards for Customs’ IT systems that integrate easily with existing commercial software, rather than the *de facto* requirement for using the propriety standards imposed by government system suppliers<sup>10</sup>.

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<sup>9</sup> Usually this information is held by their customers, who in most instances will consider it as commercially very sensitive.

<sup>10</sup> For example, German Customs recently introduced a new electronic system that requires traders to procure bespoke, interfacing software products. In contrast, it is held by many traders that the use of open standards would have significantly reduced implementation costs.

### **8. Operational flexibility**

Although consistency in enforcement (a “level-playing field”) is desirable for fairness reasons, a degree of operational flexibility is considered necessary by many proponents. Infrastructure and systems can break down or be placed under stress due to unforeseen circumstances (e.g. bad weather, strikes, fires, power-outage, military mobilisation etc.). In such instances traders and operators would call for some degree of leniency, if controls in the prescribed manner are not practical<sup>11</sup>. Similarly, operational environments can vary from location to location and rigidly formulated procedures may not always work<sup>12</sup>. Again, traders and operators may ask for a degree of regulatory flexibility.

### **9. Customer service provisions for government administrations**

There are numerous concepts of customer service that proponents of trade facilitation seek to encourage. This fits in very closely with GATT Article X negotiations (GATT 1947; 1994). It includes the use of Charter standards where government agencies subscribe to specified service levels, but also includes the provision of public websites (e.g. Velea, Hintsa et al. 2005), telephone help lines, briefing material, information literature, open surgeries and training events.

### **10. Mechanisms for corrections and appeals**

Efficient correction and appeals mechanisms allow traders to take appropriate actions in response to the decisions taken by individual enforcement officers. Proponents of trade facilitation will argue that mistakes do frequently occur. For example, an “l” and a “1” or a “B” and an “8” can easily be misread, leading to erroneous declarations (e.g. through incorrect reference numbers). Similarly, given the inherent complexities in international trade, proponents of trade facilitation will argue that it is easy for traders as well as officials to be unclear about governing procedures and requirements. By contrast, efficient correction and appeals mechanisms allow resulting costs to be kept to a

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<sup>11</sup> For example, in 2005 Finish customs officers went on strike. As a result, the border to Russia was left unchecked, making it difficult for traders in EU member states to take advantage of certain transit procedures.

<sup>12</sup> For example, it may be practical for a stevedore at a container port to deliver containers to the customs x-ray facility. By contrast, at a RO/RO port where the port stevedore does not own any handling equipment it would have to be the truck driver who delivers the goods to the x-ray facility.

minimum (where errors and mistakes have been made unintentionally or in good faith).

#### **11. Fair and consistent enforcement**

The worry here is that where rules and procedures are applied inconsistently, it diverts traffic from the most direct route and also distorts competition. Some industries will also make cases for ensuring that regulations do not affect them unfairly. For example, lobbyists working for express parcel carriers frequently lament that national post-office companies, who offer similar services, enjoy significant customs privileges that other parcel operators are unable to take advantage of (e.g. see WCO and UPU 2004).

#### **12. Proportionality of legislation and control to risk**

Here it is held that control regimes should not be disproportionate to the risks the regimes intend to provide protection against. For example, as customs tariffs fall, it becomes increasingly difficult to justify the expense of drafting legislation and procedures that seek to collect them. However, a more contentious area in this respect is the threat of terrorism. Given the uncertainty of risk to security from international trade, it is unclear to most parties involved in control and operations how far security measures should go<sup>13</sup>.

#### **13. Time-release measures**

The recommendation by proponents of trade facilitation here is to measure the time it takes for goods to clear through the regulatory process. With such measures in place, interacting parties can then work together at improving their performance. In this context Charter standards, where goods are guaranteed to be cleared within a certain timeframe, are frequently propagated.

#### **14. Risk management and trader authorisations**

The idea here is to focus government resources and efforts on illegal activity, while freeing up the legitimate trade from regulatory burden. Rather than enforcing blanket controls at set quotas (e.g. 100%, 50% or 5% of all traffic), control levels are determined in proportion to the perceived degree of risk.

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<sup>13</sup> In this context one may wish to consider Donald Rumsfeld's famous remarks on the "known knowns, known unknowns and unknown unknowns" (Rumsfeld 2002).

Traders can seek to build a relationship of trust with executive agencies and in turn enjoy lower risk profiles and physical disruption through checks. Moreover, where traders are deemed to be trustworthy, they may be given further customs privileges, by being granted an authorisation, which includes simplified customs procedures or other accommodating operational and fiscal benefits.

#### **15. Standardisation of documents, data sets and electronic messages**

Providing the backbone to trade facilitating electronic systems, common standards for documents and their electronic equivalent are generally considered to be essential prerequisites (Mulligan 1998). For example, the harmonisation of document layouts will increase familiarity and reduce levels of error (UN/CEFACT 1981). Clarity on data elements can reduce confusion. For example, in the English-speaking world it is customary to notate decimals by using a decimal point (".") and separate units of thousand by a comma (","). In contrast, continental EU member states use the comma as a decimal point and the decimal point as a separator for units of thousands. Thus 1,000 tonnes without clarification on the notation can be read as one thousand tonnes or just one tonne<sup>14</sup>. In transmitting information electronically, agreement on standards can reduce development and translation costs.

#### **16. Automation**

The introduction of electronic customs clearance systems is often described as revolutionary (Appels and de Swielande 1998). Many traders will be familiar with the benefits of automation within their own organisations and will wish to also use electronic means when interfacing with government agencies. Some even advocate "pull" technologies where administrations help themselves to required information, thus eliminating the need to make any formal declarations.

#### **17. Data exchange and Single Window**

Probably one of the biggest single issues in the field of trade facilitation, is the concept of the single window, which looks at enabling traders to submit trade

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<sup>14</sup> Practitioners can give many further examples including the same name for different unit measures (e.g. tonne and ton), different place names for the same location (e.g. Geneva, Genève, Genf and Ginevra), inconsistencies between reference numbering systems, confusion between generic and trade names or literal language translations.

related information once at a single entry point, saving them having to interface with a multiple of government executive agencies (UN/CEFACT 2004). Usually single window ideas propagate a high use of electronic systems, eliminating requirements for paper and providing an infrastructure for greater integration among the many government agencies as well as between government and business actors (COM(2003)452 final). The implementation of the single window system in Singapore has been particularly inspiring for single window projects in other countries (Applegate, Neo et al. 1993; 1995; Wulf 2004; International Trade Institute of Singapore 2005).

#### **18. International electronic exchange of data**

Numerous initiatives are being pursued to help the exchange of trade data between governments and business. For examples, shipping lines use their booking systems to collect data from their customers. This data is then used to consolidate a shipping manifest, which in turn can be used as a pre-arrival declaration for UK Customs clearance purposes. Similarly, governments may decide to publish their official certificates online. For example, New Zealand places its veterinary certificates on a password protected website, reducing the need for document courier services.

### **Trade Facilitation Literature**

Having reviewed the definitions of trade facilitation, its institutions, its recommendations and its underlying concepts, it is now possible to move on to consider its literature. As mentioned earlier, there are 792 reference documents listed in the GFP/UNTF database, produced exclusively by practitioners and policy makers, containing tools, recommendations, legislative instruments, reports, positions papers, commentaries as well as training and technical reference material (GFP/UNTF 2006). However, a more accessible or academic literature remains comparatively limited. Much of the tangled ball of string (see (Grainger 2007, chapter 1) that constitutes the cross-border environment remains little understood. Narrow literature searches for the terms “trade facilitation” and “trade procedures” using references listed in UNECE, OECD and World Bank papers, Google Scholar, the International Bibliography of the Social Sciences and the Social Sciences Citation Index as well as using personal contacts with interested academics

and officials have yielded just over 50 relevant articles and books. These papers are either from peer reviewed journals or they are widely circulated reference documents of a more authoritative<sup>15</sup> nature.

Broadly, these articles cover one or more of the following six areas of focus. These are: 1) the development of trade facilitation as a policy issue; 2) attempts, largely quantitative, to measure trade related transaction costs and the potential benefits of trade facilitation; 3) the negotiation of trade facilitation within trade agreements; 4) the use of technology in modernising trade procedures; 5) customs and supply chain operations; and 6) supply chain security. Table 9 provides a summary, attributing publications to the area of focus most dominant in the authors' work. However, as this overview reveals, findings are patchy when compared to the 18 concepts identified earlier and the prescriptive ambitions of trade facilitation.

### **The Development of Trade Facilitation as a Policy Issue**

There are a handful of publications that attempt to make the topic of trade facilitation more accessible and raise it on the policy agenda. Typically they have been produced following conferences at international institutions and contain the papers and presentations of invited practitioners (e.g. Schiavo-Campo 1999; Newsum 2003; UNECE 2003b; 2003a). In addition, there are also a few attempts by practitioners to present trade facilitation as one coherent programme (e.g. Staples 1998; Hellqvist 2002; Butterly 2003; Grainger 2003; Hellqvist 2003). Occasionally, one can also find articles in trade journals and magazines where frustrations over red tape in international trade are shared (e.g. BCC 2003; King 2003; Field 2004; Lewis 2006). The majority of this material has already been considered extensively in previous paragraphs.

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<sup>15</sup> Although not academically reviewed, they tend to have undergone some peer review process and have been supported by some form of research activity.

**Table 9. Trade Facilitation Literature: peer reviewed journal articles or widely circulated reference documents**

<p><b>1) The development of trade facilitation as a policy issue</b></p> <p><i>General literature (examples)</i></p> <ul style="list-style-type: none"><li>• Staples (1998); Schiavo-Campo (1999); Newsum (2003); Hellqvist (2002; 2003); UNECE (2003a; 2003b); Butterly (2003); Grainger (2003)</li></ul> <p><i>Internationally sponsored research, survey and audit tools</i></p> <ul style="list-style-type: none"><li>• Clark (2003); UN ESCAP (2004); Raven (2005); Widdowson (2007)</li></ul> <p><b>2) Transaction costs and potential trade facilitation benefits</b></p> <p><i>Sponsored by international organisations</i></p> <ul style="list-style-type: none"><li>• Henson, Loader et al. (1999); Wilson, Mann et al. (2000); OECD (2001); Wilson, Mann et al. (2002); OECD (2003); Wilson, Mann et al. (2003a;b); Batra, Kaufman et al. (2003); Wilson, Mann et al. (2004)</li></ul> <p><i>Sponsored by national organisations (examples)</i></p> <ul style="list-style-type: none"><li>• ITDS Office (1998); Linington (2005); JETRO (2002)</li></ul> <p><i>University based research</i></p> <ul style="list-style-type: none"><li>• Hummels (2001); Verwaal and Cnossen (2002; Verwaal and Donkers (2002); Anderson and Wincoop (2003); Verwaal and Donkers (2003)</li></ul> <p><b>3) Negotiation of trade facilitation in trade agreements</b></p> <ul style="list-style-type: none"><li>• Hooker (1999); Messerlin and Zarrouk (2000); Shin (2001)</li></ul> <p><b>4) Use of technology in modernising trade procedures</b></p> <p><i>Case studies</i></p> <ul style="list-style-type: none"><li>• King (1990); Schware and Kimberley (1995); Applegate, Neo et al. (1993; 1995); Teo, Tan et al. (1997); Mulligan (1998)</li></ul> <p><i>Survey</i></p> <ul style="list-style-type: none"><li>• Mei and Dinwoodie (2005)</li></ul> <p><i>Position Paper</i></p> <ul style="list-style-type: none"><li>• Grainger (2004)</li></ul> <p><b>5) Customs and supply chain operations</b></p> <ul style="list-style-type: none"><li>• Heaver (1992); Jones and Crum (1995); Appels and de Swielande (1998); Haughton and Desmeules (2001); Geourjon and Laporte (2005)</li></ul> <p><b>6) Supply chain security</b></p> <p><i>With passing reference to cross-border procedures</i></p> <ul style="list-style-type: none"><li>• Cranfield University (2002); Jüttner, Peck et al. (2003); Rice (2003); Rice and Caniato (2003); Sheffi (2001); Lee and Whang (2003); Lee and Wolfe (2003); Peck (2005)</li></ul> <p><i>Focusing on cross-border procedures</i></p> <ul style="list-style-type: none"><li>• Flynn (2000); Flynn (2002); Chwen, Lilly et al. (2006)</li></ul>
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Noteworthy for researchers are also a handful of framework documents that seek to encourage practitioners and policy makers to assess their country's trade facilitation needs. For example, mapping out the international supply chain for trade purposes, there is the UNECE's "BPAWG Reference Model of the International Supply Chain" (Clark 2003). Similarly, UN ESCAP produced an extensive survey tool for its members (UN ESCAP 2004), the World Bank is sponsoring John Raven's trade and transport facilitation toolkit (Raven 2005) and has recently published a trade facilitation self-assessment guide produced David Widdowson (2007) in support of GATT Articles V, VIII and X. Unfortunately, findings obtained by using these toolkits are not easily accessible, and very little comparative research has been published<sup>16</sup>.

### **Transaction Costs and Potential Trade Facilitation Benefits**

A large share of the current trade facilitation literature focuses on quantitative analysis in an attempt to measure and assess trade transaction costs as well as to evaluate the potential benefits of implementing trade facilitation recommendations. Much of this work can be viewed as supporting evidence of the effort to push trade facilitation higher up the policy agenda. As such, work comprises: research and policy papers drafted by international institutions such as the World Bank, OECD and APEC (Henson, Loader et al. 1999; Wilson, Mann et al. 2000; OECD 2001; Wilson, Mann et al. 2002; OECD 2003; Wilson, Mann et al. 2003a; Wilson, Mann et al. 2004); reports produced by or for national administrations (e.g. ITDS Office 1998; Linington 2005); and a handful of academic papers (Verwaal and Clossen 2002; Verwaal and Donkers 2002; Anderson and Wincoop 2003; Verwaal and Donkers 2003).

These reports and papers have uncovered a number of interesting and relevant findings. For instance, James Anderson and Eric van Wincoop (2003) using a gravity model find that national borders reduce trade between industrialised countries by 20-50%. The OECD (2003) using a GTAP

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<sup>16</sup> However, many authors and reports do make reference to individual country examples for illustration purposes (e.g. OECD 2003).

database<sup>17</sup> calculate that the economic prize of trade facilitation can be quite significant and is worth up to US\$43 billion worldwide for each 1% reduction in trade related transaction costs. However, they also show that, if trade facilitation only takes place in the developed world (OECD countries), developing and emerging countries (non-OECD) could be comparatively worse off. Similar calculations emphasising economic gains were made by John Wilson et al (2003b). Using gravity models, they calculate that, if APEC members who perform below average on trade facilitation proxy indices<sup>18</sup> were able to improve their performance to half the APEC average, intra-APEC trade could increase by a staggering \$254 billion and raise average GDP for the APEC region by 4.3%. Later (Wilson, Mann et al. 2004) they use a similar methodology but broaden the focus from APEC to a representative mix of 75 countries and calculate that the total gain in trade flow in manufacturing is worth \$377 billion. They also conclude that improvement of trade facilitation measures disproportionately benefits export growth<sup>19</sup>, thus making a strong case for unilateral reform through trade facilitation.

By examining the early literature of trade facilitation, the OECD identifies a number of other studies from those listed above (OECD 2001). These estimate trade transaction costs to be between 2 and 15% of the value of imported goods. Studies referenced by the OECD that draw on their own research findings include: US-NCITD (1971); SWEPRO (1985); Ernest & Whinney (1987); European Commission (1989); UNCTAD (1994); METI (1998); Haralambides & Londoño-Kent (2002) and JETRO (2002). Unfortunately, as the OECD concludes, the data from these studies are not comparable as they vary in methodology, timeframes, country samples and variables used to assess trade transaction costs. Interestingly, though, they do give insight into the nature of business transaction costs and the OECD finds that distinctions can be made between direct costs and indirect costs.

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<sup>17</sup> (see Hertel 1997)

<sup>18</sup> Proxy indices are calculated by the authors using datasets for port efficiency, customs environment, domestic regulatory environment and e-business usage.

<sup>19</sup> However, no conclusion should be drawn that discriminates trade facilitation for import procedures against trade facilitation for export procedures as export industries tend to rely heavily on imported goods.

With reference to the OECD (2001) review and Andrew Grainger's earlier papers (2003), direct costs consist of: compliance costs; and charges and fees for goods related services. Compliance costs are those costs immediately associated with collecting, producing, transmitting and processing required information and documents. Charges and fees include the expense of setting up and financing customs bonds and guarantees, laboratory testing and examination expenses, inspection fees, stamp charges, service fees levied by shipping lines and banks, labour and handling charges to deliver goods to inspection facilities and to present goods, storage charges and possible out-of-hours surcharges. Further direct costs are incurred when traders engage the services of third party intermediaries for a service fee. These include customs brokers (a licensed profession in many countries), IT vendors who offer data management and declaration services, and freight forwarders and logistics providers who offer documentation services, customs compliance and suspensory regimes (e.g. bonded warehousing). By contrast, indirect costs result from: delay at the border; uncertainty in the environment; and most of all, the loss of business and opportunities. Typically these can be associated with inadequate or contradictory documentation, congestion at inspection facilities, lack of staff (especially outside normal working hours) and unforeseen emergency measures. They also include any additional handling, storage and demurrage charges associated with delay<sup>20</sup>.

Unfortunately there is very little substantiated research that looks at quantifying trade transaction costs other than indirectly using gravity models such as those used by Wilson et al. Even larger cost-benefit analyses commissioned by governments struggle to deal with quantifying benefits in what is essentially a very complex environment with many different actors and interests (e.g. ITDS Office 1998; Linington 2005). However, there are a few reports and papers with less comprehensive objectives that yield noteworthy or illustrative findings, which shed some insight into trade transaction costs. For example, SITPRO, in an unpublished study, found that the export of milk powder from the UK to a North African country can easily involve as many as

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<sup>20</sup> These can be quite substantial. At UK container ports, demurrage charges are usually in excess of £100/day (e.g. Interview Records 13 and 24).

29 different parties and require 21 different regulatory declarations, official certificates, and transport and insurance documents often with multiple copies in different languages (for an illustration of the study, see Clark 2003, p.38). A UN study referred to by OECD (2001) reports that over 200 data elements are typically requested in a trade transaction, of which 60-70% are re-keyed at least once while 15% are re-typed up to 30 times. Batra, Kaufman and Stone (2003) found in a World Bank sponsored survey across 80 countries that the averages for release times of imported cargo stretched between 1 and 24 days. They also found that shorter border waiting times were usually associated with higher per-capita incomes; yet, the ranges for release time were very wide in countries with a per capita income of less than US\$ 9,000 and some of these countries were more reminiscent of developed countries. In an econometric investigation of US firms' location and modal choice for international trade, David Hummels (2001) found that, for manufactured goods, each day saved in travel is worth an average of 0.8 percent of its value. A study by JETRO reveals that, although about 20% of containers entering Japan on a typical ship are subject to mandatory sanitary and phytosanitary controls, these translate into 37-44% of the total direct transaction costs (JETRO 2002). Finally, Verwaal and his colleagues, who researched costs relating to customs compliance cost by small and occasional traders using Dutch fiscal databases, found that compliance costs are more specifically associated with the international trade intensity of an individual firm rather than its company size (Verwaal and Cnossen 2002; Verwaal and Donkers 2002; Verwaal and Donkers 2003). They suggest that although transaction costs repress trade, it is not so much company size that determines the relative costs; the determinants are international trade intensity and related economies of scale, use of information technology and use of simplified customs procedures<sup>21</sup>.

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<sup>21</sup> These are authorisations granted by Customs administrations which enable deferred payment of duty, inland clearance and other privileges under the Community Customs Code (2913/92/EEC).

## **Negotiation of Trade Facilitation within Trade Agreements**

Since trade facilitation has been actively considered as a topic within the framework of the WTO, a couple of papers published by peer reviewed academic journals have been produced to discuss the topic in a trade policy context. Yukyun Shin (1999) attempts to apply the topic to existing WTO instruments and committees, identifying links to the following: Agreement on Technical Barriers to Trade; Agreement on the Application of Sanitary and Phytosanitary Measures; Agreement on Import Licensing Procedures; Agreement on Rules of Origin; Agreement on Implementation of GATT Article VII (Customs Valuation Code); Agreement on Preshipment Inspection; Agreement on Trade Related Aspects of Intellectual Property Rights; General Agreement on Trade and Services; GATT Article VIII (fees and formalities); GATT Article IX (marks and origin); and GATT Article X (publication and administration)<sup>22</sup>.

Patrick Messerlin and Jamel Zarrouk (2000) take a different research focus. They ask what can be done at a multilateral level in the vast field of trade facilitation. They conclude, following a qualitative review of trade policy papers on technical regulations, that at first glance designing common public norms (e.g. following the example of the EU) may seem the best way to eliminate technical regulations related costs. However, they argue that such an approach would not be feasible on a multilateral basis. Moreover, they state that “scientific” evidence<sup>23</sup> has proven to be of poor support in WTO dispute settlements. By contrast, they argue that private initiatives to design standards have been numerous and often successful. Thus, the authors suggest that negotiations may be better focused on supporting mutual recognition agreements (MRAs), possibly under the cover of competition policy.

There are other papers published by various interest groups. Most prominent are those quantitative efforts referred to earlier by World Bank and APEC staff

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<sup>22</sup> As discussed earlier, WTO negotiations are currently limited to GATT Articles V, VIII and X. Reflection on Shin’s work suggests that there are other instruments to consider, too.

<sup>23</sup> A topical example would be the use of hormones in beef production where the EU and the US have two different views on public health and the interpretation of scientifically produced data (Hooker 1999).

as well as the OECD, which emphasise the considerable economic prize. Bringing it to the point, Wilson et al. (2003a) argue that trade facilitation measures can be a good policy alternative to tariff reductions where the latter is not feasible. Formal submissions to the WTO secretariat are made by various nation states. Most of them are listed in the WTO's document archive<sup>24</sup> and there appears to be remarkable consensus on the merits of negotiating trade facilitation in a multilateral setting (WTO 2006d) – despite Messerlin and Zarrouk's (2000) reservations. However, current discussions within the WTO largely cover GATT Articles V, VIII and X with links to Capacity Building efforts. It does not include any of the other more contentious Singapore Issues<sup>25</sup>, nor do discussions cover the full breadth of applicable instruments detailed by Shin (1999).

### **Use of Technology in Modernising Trade Procedures**

The literature on this subject has a very different tradition and, instead of looking at quantifiable benefits, trade policy and instruments, it looks at the use of information and communication technologies (ICT). It is largely focused on building case studies, highlighting the benefits of ICT in trade and the merits of sharing common standards. It draws strongly on UN Recommendation No1 (UN/CEFACT 1981), encouraging the alignment of trade paper documents to a common standard as well as to the more recent electronic standards for EDI and XML promoted through national trade facilitation committees and international organisations such as UNECE or WCO.

This work also includes Robert Schware and Paul Kimberley's (1995) collection of 20 brief country studies, where information technology is used to help trade facilitation efforts. Similarly, Robert Mulligan's (1998) case study looks at three UK companies and their use of EDI in trade transactions, consolidating the illustrative findings into one paper. Applying case study methodology, other research looks at Singapore's TradeNet system, which is

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<sup>24</sup> Helpfully, the WTO maintains a dedicated landing page for trade facilitation related searches: [http://www.wto.org/english/tratop\\_e/tradfa\\_e/tradfa\\_negoti\\_docs\\_e.htm#documents](http://www.wto.org/english/tratop_e/tradfa_e/tradfa_negoti_docs_e.htm#documents)

<sup>25</sup> To recap, in addition to trade facilitation these included: transparency in government procurement; investment; and, competition policy.

frequently propagated as a leading example of the Single Window concept (e.g. UN/CEFACT 2004). This research includes the three Harvard Business School case studies (King 1990; Applegate, Neo et al. 1993; 1995) and Hock-Hai Teo et al's (1997) accounts. They report on the strategic decisions by the Singapore government to enhance its island as a trading hub through the development of TradeNet as well as how TradeNet was rolled out by government authorities. While the Harvard Business School's work is presented as a narrative account for class discussion, the latter is based on observations and interviews. Finally, Mei and Dinwoodie's (2005) study looks at exploring the potential for electronic shipping documents in China by drawing on survey data. ICT is the driver in many policy initiatives. Considering that trade facilitation organisations have been encouraging ICT programmes since the mid 1960s (Raven 2005, p.86) and that it lies at the heart of many policy initiatives – such as the revised Kyoto Customs Convention (WCO 1999) and the EU customs' modernisation programme (COM(2003)452 final; Grainger 2004) – it is surprising that so little literature on the subject has been produced.

### **Customs and Supply Chain Operations**

While Andrew Grainger (2000a), in a short practitioner's article, matches UK customs procedures and associated fiscal implications to import and export transactions, most identified literature in this category takes recent innovations in ICT and customs reform as its starting point. For instance, Trevor Heaver (1992) argues that, while the freight forwarding industry has adopted EDI and information technology, take-up amongst customs administrations is not as prolific. Consequently, unnecessary transaction costs in cross-border operations remain. His observations are based on a study of Canadian freight forwarders who have operations in the USA, UK and the Netherlands. By contrast, Carolyn Jones and Michael Crum (Jones and Crum 1995) consider the implications of the USA's Customs Modernization and Informed Compliance Act for the logistics pipeline. They find in their review of legislation and literature that, while ICT translates into faster clearance and lower transaction costs, benefits are somewhat offset as some of the traditional customs responsibilities have been shifted to the trader.

Ton Appels and Henry Struye de Swielande (1998), two consultants from AT Kearney, describe an evolution in customs policy where controls shift from physical inspections to controls that check the trader's processes<sup>26</sup>. They urge companies in their article to take advantage of ICT and change from a passive attitude towards compliance to becoming more proactive – using the hands-off control approaches offered by more modernised customs administrations. Reaching a similar conclusion, Michael Houghton and Remi Desmeules (2001) provide a qualitative analysis of existing and proposed customs reforms. They point out that much of the reform is driven by customs administrations rethinking the relationship they have with their “customers”. They conclude that firms have much to gain by engaging with customs administrations, especially where it leads to a process focused control regime instead of the more disruptive physical inspections of each and every consignment.

Worrying about revenue collection in developing countries, Anne-Marie Geourjon and Bertrand Laporte (2005) consider whether less rigorous, risk based controls (focusing on audits and inspection of processes instead of the inspection of goods at the border) have an effect on revenue collections. Using an econometric model that examines two (unnamed) African countries, they find that sophisticated risk management techniques can facilitate trade by targeting consignments more effectively, thereby enhancing revenue performance.

### **Supply Chain Security**

As argued earlier in this review, cross border security considerations are a relatively new addition to the trade facilitation agenda. Most of the research in this area still looks at “resilience” type questions, exploring company strategies in response to unforeseen supply chain disruptions – such as a terrorist attack. Work in this area seems to be based around Cranfield University (Cranfield University 2002; Jüttner, Peck et al. 2003; Peck 2005)

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<sup>26</sup> While not referenced by the authors, these changes match the recommendations set by the WCO Kyoto Customs Convention and risk based controls.

and the MIT (Rice 2003; Rice and Caniato 2003), which has been able to attract extensive government and industry funding. Early papers that introduce the topic have been published in *Foreign Affairs* (Flynn 2000; Flynn 2002) and the *International Journal of Logistics Management* (Sheffi 2001). Other subsequent work includes the efforts of the Stanford Business School (Lee and Whang 2003; Lee and Wolfe 2003). However, much of the focus of research appears to be exclusively on business responses to security threats. With the exception of Flynn's early articles in *Foreign Affairs*<sup>27</sup>, only passing reference has been made to the role of government agencies at the border and their control activities – despite the avalanche of new regulatory controls! While there are a number of conference papers by practitioners that emphasise the impact of various security focused control regimes (e.g. Browning 2003; Grainger 2005), reviewed academic work is limited to a paper by Chwen Sheu et al (2006) who evaluates recent US Customs security initiatives by collating three business case studies. Interestingly, they conclude that the value of these programmes to logistics security is not clear.

## **Review Conclusion**

Based on this trade facilitation review, it is evident that trade facilitation is nothing new and as a topic has been an aspect of trade policy considerations since the beginning of the post-World War II international trade regime. As such, it has a home in international organisations like the UNECE, the WCO and the WTO, but is equally prevalent in regional trade agreements as well as in national efforts to improve the trade environment. Recent WTO negotiations and the avalanche of new supply chain security focused regulations have pushed the topic of trade facilitation into the limelight.

Extensive literature has been written by proponents of trade facilitation. They largely see trade facilitation as the simplification, harmonisation, standardisation and modernisation of trade procedures. To meet these trade facilitation principles, they have created a body of recommendations. Some of them are well documented in the form of international recommendations. However, many of the prescriptive concepts underlying them (18 of them have

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<sup>27</sup> Stephen Flynn is a Commander in the US Coast Guard.

been catalogued in this paper) have barely been reviewed outside the realm of practitioners' activities<sup>28</sup>.

Current research in trade facilitation is focused around six subject areas: trade facilitation as a policy issue; transaction costs and benefits; WTO negotiations and agreements; case studies in the use of technology; customs and SCM; and security. This patchwork of research does shed light on the topic matter. Some of it, especially where the focus is on costs and benefits, has immediate use to proponents of trade facilitation. However, research activity remains fragmented.

Much of the complexities and dynamics inherent in international trade have yet to be mapped out. While trade facilitation as a topic is prescriptive in nature – it seeks regulatory reform – very little work by researchers or practitioners has been conducted on how to implement programmes or give consideration to its drivers and their underlying interests. It is very much grounded in a “systems” metaphor which considers day-to-day operations without looking at the wider institutional forces at work. While the rationale for trade facilitation is compelling, the fact that it has taken more than 50 years after Bretton Woods for trade facilitation to reach the limelight suggests that prescriptive recommendations, cost-benefit calculations, case studies in information and communication technology or security fears, do not tell the full story.

By contrast, the link between trade facilitation and supply chain operations makes it possible to draw on a wider and more developed literature (- if only government actors were acknowledged by the SCM literature as an integral part of supply chains). Recent momentum by legislators to impose controls that extend across the entire supply chain – not just at the border – places a degree of urgency on the logistics and SCM literature, if it still is to be relevant.

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<sup>28</sup> The more public information sources describing these include the GFP/UNTF database (GFP/UNTF 2006) and UNECE edited readers (UNECE 2003b; UNECE 2003a). However, many of the concepts are still presented as ideas or international recommendations without much reference to any substantiated research findings.

Similarly, the link between trade facilitation and WTO negotiations gives room for considering ideas and theories developed in the literature of international political economy (e.g. Strange 1993) which are well developed in the area of institutions (e.g. North 1991), regimes (Krasner 1983) as well as drivers and interests (e.g. Hall 1997).

Moreover, the research of trade facilitation with consideration for its institutions and drivers provides an opportunity to extend the supply chain literature and develop new theories of relevance that includes government actors in international trade operations. Likewise, the inclusion of institutional variables in trade facilitation deliberations would help evaluate the very pressing question of how to best implement trade facilitation concepts – given the considerable sums allocated to trade facilitation projects this ought to be at the very top of the mind for any trade facilitation proponent or budget holder.

Considering the relatively small body of research literature in the field of trade facilitation there remains considerable scope for more substantiated research activity. This includes: the question of how to implement trade facilitation recommendation and programmes; gaining a deeper understanding of the form and shape of the cross-border environment and international supply chains; the evaluation of potential scope for simplifying and reducing the current operational and institutional complexity in international trade; as well as the many, often conflicting, interests of actors in shaping the cross-border environment.

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