CUSTOMS AND TRADE FACILITATION: FROM CONCEPTS TO IMPLEMENTATION

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This paper builds on research data, tables and diagrams which formed part of Andrew Grainger's (2007) PhD Thesis 'Trade Facilitation and Supply Chain Management: a case study at the interface between business and government'.

Abstract

Trade facilitation is the simplification, harmonisation, standardisation and modernisation of trade procedures. It seeks to reduce trade transaction costs at the interface between business and government and is an agenda item within many customs related activities. These include WTO trade round negotiations, supply chain security initiatives, development and capacity building programs, as well as many customs modernisation programs. However, the implementation of trade facilitation principles is fraught with obstacles. Obstacles identified in this paper include conflicting interests, institutional limitations and lack of knowledge. Policy makers and project managers stand to gain from more substantiated research aimed at deepening their understanding of cross-border operations, its inherent dynamics, stakeholder interests and institutional limitations. Currently such knowledge is seldom found in one place.

Introduction

The concept of trade facilitation is receiving unprecedented attention and is at the heart of numerous initiatives within the customs world. Trade facilitation has become a substantive item within WTO trade round negotiations, it is frequently referred to in supply chain security initiatives, and is a feature within many customs modernisation programs. Trade facilitation is also a significant item within wider aid-fortrade and capacity building initiatives. 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).

Within the area of supply chain security, trade facilitation is seen as a concept that can help improve controls and offset the additional burden on legitimate traders. Within WTO trade round negotiation, trade facilitation provides a relatively non-contentious and promising initiative in the non-tariff area. The OECD calculates that each 1% saving in trade related transaction costs yields a worldwide benefit of US\$43 billion (OECD 2003). This potential has not gone unnoticed by the donor community. Between 2002 and 2005, donors committed on average US\$21 billion per year on more narrowly defined aid for trade projects (OECD & WTO 2007). Spend on trade facilitation specific projects has increased from US\$101 million in 2000 to US\$391 million in 2006 (WTO/OECD 2008). Trade facilitation is also a substantial feature in many customs modernisation programs. This includes the European Union's Modernised Customs Code and vision for a paperless trade and customs environment (COM(2003)452).

final), the Association of Southeast Asian Nations' (ASEAN) commitment to interoperable single window systems, as well as large scale IT projects in Australia, New Zealand and elsewhere.

Although international organisations like the WCO and the United Nations Economic Committee for Europe (UNECE) have produced catalogues of trade facilitation recommendations aimed at improving the trade and customs environment, their implementation is fraught with challenges and difficulties. These can be associated with conflicting interests, institutional limitations and lack of knowledge. This paper takes a closer look at the trade facilitation agenda, concepts and obstacles.

The International Trade Environment

The trade environment is complex and sets a wide field for trade facilitation. It is easy to count 60 or more distinct trade procedures targeting goods, the vehicles that move them (for example, ships, planes and trucks) or their operators (for example, drivers, seafarers, flight crew) (Grainger 2007a). Control objects include: revenue collection; safety and security; environment and health; consumer protection; and trade policy (Table 1). In the majority of countries a significant share of these controls will be performed by Customs or under customs supervision.

Table 1. Examples of international trade related regulatory activity

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

Source: Grainger 2007

Commercial arrangements within international trade are no less complex. The international movement of goods includes a number of operational steps. Prior to export this includes packing, storage, haulage to the port, port entry and customs clearance, and loading onto a vessel. Once arrived in the port of destination, operations include off-loading, storage, release from the port and customs clearance, delivery to the buyer, unpacking, after-sales services (for example, assembly, warranties and guarantees) and more. Depending on the trading terms between buyer and seller, contractual responsibilities for the operations can lie with one or the other party, or it can be split anywhere along the way depending on the Incoterms used (ICC 1999).

In most instances a wide range of intermediaries will be employed to move goods. These include amongst others: transport operators, trucking and haulage companies, freight forwarders, customs brokers, banks and finance companies, insurance companies, port operators and stevedores, and IT systems suppliers. It is not unusual for intermediaries to further subcontract. For instance, a freight forwarder may subcontract to another forwarding company in markets where he has no staff. A haulage company may decide to subcontract on the day because his drivers are caught in traffic jams or otherwise tied up.

Compliance with customs and trade procedures demands a great deal of coordination between the various business entities involved in moving the goods. Seldom will any one party have full view or knowledge of all operational steps. For example, the exporter may know what goods have been consigned to his overseas customer and at what price. The packing company will know in which containers these goods have been stuffed. The freight forwarder will know on which ship the container has been booked and the shipping line will know when and where the goods have been offloaded. The buyer will know what price he has paid for the goods. At each stage of the movement different types of data are generated and different types of information (often containing the same or similar data) are submitted to Customs and other government agencies (Figure 1).

Country A Country B Physical and Collec Physical Operations Unloading of transport Vehic Seller Buyer Shipment Export Procedures Import Procedures Transport Exped Decu Declaration Declaratio port Decur Regulatory nake Payer oice Buve ١

Figure 1. Business processes in a typical trade transaction

Source: Grainger 2007c

Every time one of the parties within the supply chain is required to submit information to government agencies, trade transaction costs occur. These might be direct or indirect. Direct transaction costs include immediate compliance costs such as those associated with collecting, producing, transmitting, posting, faxing and processing information required to prepare and submit documents (paper or electronic). Direct transaction costs also include the charges and fees associated with setting up and financing customs bonds and guarantees, testing and use of laboratories, inspections, and stamping of documents. Charges and fees are also levied by many of the intermediaries. For instance, the port stevedore is likely to charge for the delivery of a container to the customs shed. Agents, employed to make customs declarations, will charge for their services. Out-of-hours and fast-tracked operations are likely to attract a premium fee. Indirect trade transactions result from delay at the border, uncertainty about procedures

and requirements, and missed or lost business opportunities. Typically, indirect transaction costs can be associated with inadequate or contradictory documentation, congestion at inspection facilities, lack of staff (especially when operating outside normal working hours), and unforeseen circumstances – such as bad weather or damage to infrastructure and facilities (OECD 2003; Grainger 2007c).

Trade facilitation seeks to remedy trade transaction costs. Trade facilitation recognises that transaction costs are wasteful and undesirable for both business and government. Proponents of trade facilitation will argue that its principles can increase business competitiveness as well as improve efficiency and control.

Defining trade facilitation

This paper has already made reference to the WTO which defines 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). Many practitioners simply define trade facilitation as the simplification, harmonisation, standardisation and modernisation of trade procedures.

However, other definitions go a little further. For example, the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), defines trade facilitation as 'the simplification, standardization and harmonization of procedures and associated information flows required to move goods from seller to buyer and to make payment' (OECD 2001). By emphasising payment procedures UN/CEFACT acknowledges the role that commercial procedures, banks and other financial institutions play in international trade operations. In fact, much of the information necessary for customs purposes can be found within standard commercial invoices between seller and buyer. Occasionally, the term 'trade facilitation' is also used more literally, and is extended to mean the improvement of transport infrastructure (that is, transport facilitation), 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 trade facilitation definitions is the desire to improve the trade environment and reduce or eliminate any transaction cost between business and government. UN/CEFACT, in its Recommendation No. 4 (1974) is quite explicit on the reformatory objectives of trade facilitation, stating that the trade facilitation program ought to be guided by the '...simplification, harmonization and standardization [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, procedures and procedures...; harmonization is the alignment of national formalities, procedures, operations and documents with international conventions, standards and practices; [and] standardization is... the process of developing internationally agreed formats for practices and procedures, documents and information'. As such, trade facilitation is at once a political, economic, business, administrative, technical and technological issue (Butterly 2003).

Organisations with an interest in trade facilitation

To a large degree, trade facilitation can be viewed as an extension of the efforts to liberalise international trade. As history shows, trade facilitation is not a new phenomenon. For instance, many medieval European market towns would publicly display the units and measures used for the sale of goods. In some towns, like Bern in Switzerland, these measures can still be found on display today. In more recent history, trade facilitation has become firmly established within the current international trade regime. Organisations with an active interest in trade facilitation are found at the international, regional, national, and even at the local level.

International organisations include the WTO where trade facilitation has become a substantial feature within the Doha trade round. Discussions currently focus on GATT Articles V, VIII and X, covering Freedom of Transit, Fees and Formalities, and Publication and Administration of Trade Regulations. Another very active international body is UNECE which has become the global focus point for trade facilitation recommendations, standards and specifications. UNECE is also home to the UN/CEFACT. UN/CEFACT looks after 33 international recommendations, the most recent one being a recommendation for the Single Window concept (UN/CEFACT 2004). UN/CEFACT also manages various document and electronic messaging standards, including the United Nations electronic Trade Documents (UNeDocs) and Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT). The UNECE is also the home for international agricultural quality standards (UNECE 2006b), classification standards for dangerous goods (UNECE 2006a), and with the International Road and Transport Union (IRU), it also runs the TIR Convention of 1975 (TIR 2005). The latter provides a simplified customs transit regime to signatory countries.

The WCO is an active body with an interest in the field of trade facilitation within the customs world. The WCO has drafted numerous instruments and recommendations that contain trade facilitation principles. Noteworthy examples include the Kyoto Convention which first came into force in 1974, followed by the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures adopted in 2006 (1999; WCO 2006). Another, relatively recent instrument that makes direct reference to trade facilitation principles is the Framework of Standards to Secure and Facilitate Global Trade adopted in 2005 (WCO 2005). The WCO is also the home for the Harmonized Commodity Code Description and Coding Systems, and in cooperation with the WTO, the WCO also helps ensure consistency in the technical interpretation of valuation rules and non-preferential origin rules.

Other international organisations active within the wider field of trade facilitation include the International Maritime Organisation (IMO), the International Chamber of Commerce (ICC), the International Civil Aviation Organisation (ICAO) and the International Organization for Standardization (ISO). Helpfully, the UNECE and UNCTAD (United Nations Conference on Trade and Development) produced a 'Compendium of Trade Facilitation' which summarises many of the international recommendations (UN/CEFACT & UNCTAD 2002). In terms of capacity building and economic development much trade facilitation work has also been done by organisations like the World Bank, UNCTAD, OECD and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). A global network of practitioners and policy-makers – including a dedicated website – is maintained by the Facilitation Network for Transport and Trade and the UN Trade Facilitation Network of Partners (see: http://www.gfptt.org).

At the regional level, trade facilitation is an equally significant agenda item. For instance, the European Union has largely removed the internal borders between its 27 members. Operating as a customs union, they share one common external tariff and subscribe to the same custom legislation. Further reform is currently under way to overhaul customs procedures and achieve interoperability amongst member state customs systems (TAXUD/477/2004 2007). Another example of progressing regional integration through customs and trade procedures can be found within the Association of Southeast Asian Nations (ASEAN). Its members have agreed to work towards establishing interoperable single window systems (ASEAN 2005). There are many other regional agreements that include reference to customs and trade procedures. In 2005 there were 183 WTO-registered regional trade agreements in force (WTO 2005). The more prominent ones amongst these are the North American Free Trade Agreement (NAFTA), Mercosur in Latin America, and the Common Market for Eastern and Southern Africa (COMESA).

The reduction of trade related transaction costs is an equally significant agenda item at the national level. Trade facilitation policy objectives might be pursued by national customs administrations, trade ministries or, for that matter, any other government department involved in the governance of the cross-border environment. Many of the recommendations propagated by international organisations have

their roots in national best practice examples. For example, Singapore's pioneering TradeNet has been particularly inspiring for single window projects elsewhere (Teo, Tan & Wei 1997; UN/CEFACT 2004). To help find transaction cost problems and possible solutions, many national customs organisations actively seek to consult with their business stakeholders. Some countries also have dedicated trade facilitation organisations – so-called PRO committees – which offer a degree of independence from the constraints often found within government departments (UN/CEFACT 1974). At the local level, further examples of active trade facilitation work can be found. For instance, many major seaport operators will regularly invite their users, customs officers and other representatives from government to discuss how improvements in day-to-day operations can be achieved.

Scope and concepts

This paper has made reference to a number of organisations with an interest in trade facilitation. Indeed, the list of recommendations and their scope is long. The UN/CEFACT and UNCTAD (2002) compendium to international trade facilitation recommendation covers at least ten areas (Table 2). Trade facilitation for many customs administrations involves activities as varied as agreeing on document and communication standards; providing information and guidance to traders; finding means to cooperate with legitimate traders (for example, through risk-management, meaningful incentives and preferential treatment); coordinating control activities with other government departments and avoiding any duplication; listening to trader concerns and finding practical solutions; a commitment to making procedures as simple and transparent as possible; keeping the control burden in proportion to control objectives (for example, unnecessary heavy-handedness is likely to drive trade away or help build up a shadow economy); and adhering to pre-agreed service levels (for example, time taken to clear goods).

Table 2. Scope covered by international trade facilitation recommendations

International trade facilitation recommendations cover:

- Trade procedures
- Customs and regulatory bodies
- Provisions for official control procedures applicable to import, export and transit including: general
 arrangements, customs controls, official documentation, health and safety, financial securities, and
 transhipment
- Provisions relating to transport and transport equipment, including: air transport; sea transport; and multimodal transport
- Provisions relating to the movement of persons
- Provisions relating to the management of dangerous goods
- Provisions relating to payment procedures
- Provisions relating to the use of information and communication technologies
- Provisions relating to the commercial practices and the use of international standards
- Legal aspects of trade facilitation

Source: UN/CEFACT and UNCTAD 2002

Within the WTO negotiations, trade facilitation currently falls under GATT Articles V, VIII and X. These address the freedom of transit, fees and formalities, and publication and administration of trade regulations. These GATT articles are of immediate relevance to the customs world. In official communications from the WCO to the WTO, suggested content covers those ideas detailed in Table 3.

Table 3. WCO Trade Facilitation Recommendations under GATT Articles V, VIII and X

Trade facilitation recommendations under Article V:

- accept commercial documents (e.g. invoice and transport documents) instead of mandating formal regulatory declarations
- set simple and clear procedures for identifying consignments
- ensure non-discrimination of goods
- use of international agreements; and, a commitment to regulatory cooperation

Additional trade facilitation recommendations under Article VIII:

- regulatory fees ought not exceed expenses
- standardization and simplification of customs and trade documents
- · coordinated intervention and convergence of regulatory controls
- simplification of governing trade procedures
- the Single Window concept
- use of risk management techniques
- use of information technology
- common data models
- time guidelines for border clearance
- adherence to international customs conventions

Additional trade facilitation recommendations under Article X:

- accessible publication of procedures and requirements
- active provision of information
- procedures for advance and binding rulings
- fair and efficient appeal and tribunal procedures
- use of memoranda of understanding between regulatory bodies and traders

Sources: WTO 2002a; 2002b; 2002c

Similar themes can also be identified in trade facilitation and security discussions (Browning 2003; WCO 2007) where additional security requirements include the introduction of advance notification; more targeted controls; the use of new technologies in physical inspections (for example, 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. Some trade facilitation themes within supply chain security considerations can be found in Table 4.

Table 4. 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

However, for most practitioners trade facilitation revolves around 'better regulation' and utilising information and communication technology (Grainger 2007c). 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 most proponents of trade facilitation. These are summarised in Table 5.

Table 5. Trade facilitation concepts: a practitioner's observation

Better regulation:

- 1. Simple rules and procedures
- 2. Avoidance of duplication
- 3. Memoranda of Understand (MoUs)
- 4. Alignment of procedures and adherence to international conventions
- 5. Trade consultation
- 6. Transparent and operable rules and procedures
- 7. Accommodation of business practices
- 8. Operational flexibility
- 9. Customer-service provisions for government administrations
- 10. Mechanisms for corrections and appeals
- 11. Fair and consistent enforcement
- 12. Proportionality of legislation and control to risk
- 13. Time-release measures
- 14. Risk management and trader authorisations

Information and communication technology:

- 15. Standardisation of documents and electronic data requirements
- 16. Automation
- 17. Single Window
- 18. International electronic exchange of trade data

Source: Practitioner observations

Implementing trade facilitation

For most, the benefits of trade facilitation and reduced transaction costs between business and government are self-explanatory. Customs administrations are faced with ever-rising volumes of trade and, at the same time, they are obliged to add yet new layers of controls, for example in the security area (Grainger 2007a). Trade facilitation concepts help customs administrations meet their duties. Similarly, business supply chains are very fluid and no two supply chains appear to be the same. Where businesses

compete in terms of costs, any reduction in trade related transaction costs will yield an advantage. Thus, transaction costs threaten business competitiveness and inhibit Customs' best use of limited control resources. However, despite the immediate utility of trade facilitation for both business and government organisations, the implementation of trade facilitation concepts is often riddled with difficulties. Most of these can be associated with conflicting interests, institutional limitations and lack of knowledge.

Conflicting interests

There are many examples of conflicting interest which hamper successful implementation of trade facilitation initiatives. Sources of conflict may be found between government and business stakeholders; local, national and international interests; government departments (for example, customs and veterinary inspectors); policy priorities; industries; countries (for example, who have different legacy arrangements or IT system suppliers); and between liberal and protectionist trade policy tendencies (Grainger [2008] forthcoming).

To give some examples, most trade and customs procedures enforce a specific obligation on the trader. The relationship is defined as one between compliance and enforcement. Although trade facilitation rhetoric is strong in both camps, many enforcement officers have been trained in an environment where the worst is always assumed. These 'die-hards' find it difficult to give-up the assumption that every trader is a potential smuggler or acknowledge that the majority of traders have legitimate intentions. Evidence of counterproductive heavy handedness can easily be found at most borders. For instance, in a survey of UK importers 19% (N=131) of respondents admitted to actively diverting traffic to an alternative port because of actual or perceived differences in the enforcement of rules and procedures (Grainger 2007b).

The incompatibility of procedures with local operational practices can be another area causing conflicting interest. Customs, on the one hand need to enforce the law, on the other hand, they may find that is not optimally defined to suit the operational needs of business stakeholders. For example, when UK Customs introduced x-ray scanning, they mandated port operators to deliver goods to the x-ray facilities. At container ports, where the port operator owns the handling equipment, this was not much of a problem. However, most RO/RO ports do not have any cargo handling equipment. At these ports, it is customary for lorry drivers to drive straight off the ship, or where rolled-off to the quayside, for hauliers to come and pick up the goods. With Customs' introduction of x-ray equipment truck drivers and hauliers could no longer just leave the ship and drive off the port. Where selected, they need to divert to the customs x-ray facility, causing delay. This delay may even be further compounded by restrictions on maximum working and driving hours. This example illustrates different interests between container port operators and RO/RO port operators. The former do not object to presenting goods to x-ray facilities while the latter face a significant operational burden.

Conflicting interests in the form and shape of the trade environment can also arise through overlaps between different government departments' activities. For example, the avalanche of recent supply chain security controls can be described as 'security spaghetti' (Grainger 2007a) where different government bodies enforce similar procedures with similar control objectives. While trade facilitation principles would advocate a more coordinated and integrated approach – reducing the extent of duplication and overlap – government departments are likely to be resistant to letting-go-of or taking-on new pieces of turf.

Different political priorities can cause a similar problem of conflicting interests. For example, the EU's 'electronic customs initiative' was originally pursued as a trade facilitation initiative (COM(2003)452 final). However, the reform project faced political pressures to fast-track supply chain security components. While the security features of the reform project are now being implemented, much of the promised reform entailing wider trade facilitation principles remains in the making (Grainger [2008] forthcoming).

Conflicting and opposing industry interests also add to the difficulty of implementing trade facilitation. Business is seldom able to speak with one voice. Individual companies as well as industries compete with each other. While all have a common interest in reducing costs, any regulatory reform will impact different companies and industries in different ways. It may even be that some will lose out, even if overall transaction costs are reduced. For example, research has found that economies of scale are at work when complying with trade and customs procedures (Verwaal & Donkers 2002; 2003; Grainger 2007b). Much of the investment required is a fixed cost (for example, purchase of specialist IT systems and employment of dedicated staff). Companies with large trade transaction volumes are better able to offset these fixed costs. In contrast, compliance will be proportionately more expensive for companies with smaller transaction volumes. This latter group of traders will have more of an incentive to employ the services of agents and customs brokers with larger transaction volumes. Any changes to fixed cost requirements (for example, through more efficient trade procedures) will have a direct impact on current business models. Subsequently, responses to proposed changes – even if trade facilitation is the end-goal – are likely to be very different.

Institutional limitations

Many institutional limitations can be identified within the area of trade facilitation. At their core lies a conflict between day-to-day business operations and mechanisms employed to govern the trade environment. While the former is very fluid and can change from one transaction to the next, the latter is embedded within the wider regulatory regime. As such, any regulatory reform accommodating trade facilitation concepts will take time. Issues identified at the local level (for example, within the context of day-to-day port operations) need to be escalated to national level (for example, the national customs headquarters), the regional level (for example, regional bodies like the EU) and international policy level (for example, the WCO, UNECE and WTO) (Grainger 2007a). In the absence of an accommodating regulatory framework many potentially innovative solutions – for instance, the single window concept – can be difficult to put in place.

Legacy arrangements can be equally difficult. Any changes will attract costs. Stakeholders need to be convinced that the costs for migrating tally with the benefits. Given the obvious conflicting interests, convincing stakeholders is a difficult task. Often it requires considerable political capital and resource to help overcome initial resistance. However, the necessary political support is not easily obtained. Customs and trade procedures are often perceived to be overly technical and their inherent complexities are difficult to present. Unless the driver is as emotive as 'security', 'competitiveness' or 'development', it can be a difficult task to entice the necessary political support. Proponents of trade facilitation – within business and Customs – often need to resort to intensive lobbying within the corridors of power and repeatedly argue their case.

Although trade facilitation has recently gained significant momentum as an agenda item, it does not really have a 'home' within most countries. Very few nations have a dedicated trade facilitation organisation. Within other organisations trade facilitation is one of many competing agenda items. Subsequently, many of the trade facilitation ideas and concepts can easily be lost. For example, this paper has argued that trade facilitation is about reducing transaction costs. This has utility for both business and government stakeholders. However, rhetoric in the customs world frequently sees trade facilitation as an opposite to control, failing to recognise the benefits to customs administrations (for example, better quality of data, more targeted controls and better use of scarce resources) (Grainger [2008] forthcoming).

Even where conflicting interests and initial institutional limitations have been overcome, the implementation of trade facilitation is riddled with further institutional challenges. For example, many customs administrations distinguish between 'policy' and 'operations'. While the former looks at wider trade governance questions (usually located in the capital), the latter is tasked with implementing and enforcing trade procedures (usually located at the ports and borders). With trade facilitation, which

looks at overcoming operational frustrations and transaction costs, it is essential that those dealing with policy are familiar with operational practices. Where there is a large distance between 'operations' and 'policy' it can be difficult to find the required combination of experiences. This can severely impair trade facilitation motivated initiatives.

Another example of conflict between operations and policy can be found in the way many customs administrations rely on the services of third party IT suppliers. As outlined earlier, many trade facilitation proponents see innovations in information technology as an opportunity to overhaul governing legislation and trade procedures. However, where the IT capabilities are with third parties, it becomes very difficult to engage the administration. Often changes to electronic infrastructure force customs administrations to revisit their contractual relationship with suppliers. These are often tangled up in complex procurement (or donor) procedures. Moreover, the interests of incumbent IT suppliers may not always be compatible with trade facilitation's harmonisation and standardisation objectives. Incumbent IT suppliers often benefit from exclusive contractual arrangements and market leverage through use of proprietary standards and systems. Within a more harmonised and standardised IT framework these incumbents are likely to face greater competition and reduced profit margins subsequent to potential threats from lower cost 'off-the-shelf' solutions and open-source initiatives (for example, akin to UNCTAD's ASYCUDA (Automated SYstem for CUstoms DAta) customs software).

Lack of knowledge

Much of the recent, more quantitative, research is aimed at assessing the benefits of trade facilitation. It draws on the use of models, for example, OECD (2003) and Wilson, Mann and Otsuki (2004). While they do yield satisfactory figures for policy purposes, the operational detail within which trade facilitation seeks to find improvements is less explored. Much of the international recommendations are prescriptive in nature. Their implementation assumes a top-down implementation whereby policy executives take international recommendations and transpose them at home. Donors often draw on survey methodologies to identify whether requirements for implementing international recommendations exist (UN ESCAP 2004; Raven 2005; Widdowson & World Bank 2007).

However, the practicalities of implementing trade facilitation and overcoming conflicting interests and institutional limitations have barely been researched. Trade facilitation focuses on the operational interface between business and government. Thus, a bottom-up approach, whereby solutions to operational frustrations are sought, is just as much merited as the top-down approach. In the absence of dedicated trade facilitation institutions – be it in the form of a PRO committee (UN/CEFACT 1974) or within the mechanisms of public consultation – it can be very difficult to identify operational frustrations at the border and associated scope for trade facilitation. Even where operational officers become aware of problems they need mechanisms to escalate these to the more senior policy levels. Evaluation of operational frustrations and potential for trade facilitation requires a great deal of skill, rarely found in one place. Policy makers as well as project managers have few organisations to turn to. This deficit can add significantly to what are already formidable obstacles to trade facilitation.

Research at the operational interface has barely begun (Grainger 2007c). Trade facilitation is interdisciplinary in nature, bringing together the management disciplines (such as strategy, supply chain management, information technology, transport, operations and logistics), the legal fields (the laws of trade, customs, contract and agency, amongst others) and the political and economic sciences (for example, economics, public administration, international relations and political economy). Few organisations or institutes have yet attempted to bring these many different fields together and apply themselves to researching and evaluating the trade facilitation field.

Conclusions

Trade facilitation is receiving unprecedented attention and has become a feature in WTO negotiations, supply chain security, capacity building and customs modernisation programs. It seeks to find improvements within the trade and customs environment and reduce transaction costs between business and government. Both business and government stakeholders stand to gain from trade facilitation's simplification, harmonisation, standardisation and modernisation objectives. However, the international trade environment is complex. Trade operations can involve a range of different types of business stakeholders. Similarly, Customs is not the only governmental body with an interest in trade related controls. Many other government agencies have a stake in the control of national borders and the movement of goods, too.

Although trade facilitation concepts and recommendations are reasonably well understood and are a substantial agenda item within many worthy organisations, their implementation is wrought with obstacles. Considering the trade environment's complexity, many different, often conflicting, interests are at work. Institutional limitations add further to implementation difficulties. Policy executives tasked with identifying transaction cost problems, evaluating scope for trade facilitation and implementing trade facilitation programs require a wide range of experience and skills. These are seldom found within one single organisation.

The evaluation of trade facilitation type problems is multidisciplinary in nature. Few organisations or institutions have applied themselves to examining the trade facilitation problem in its entirety. Perhaps it is time to move on from prescriptive recommendations and consider the practicalities and difficulties of simplifying, harmonising, standardising and modernising trade procedures. The devil tends to be in the detail, and very little public accessible research that examines the cross-border environment and trade procedures has been conducted. Policy makers and executives would benefit from more substantiated research aimed at deepening their understanding of cross-border operations, their inherent dynamics, stakeholder interests and institutional limitations. Wider use and development of dedicated trade facilitation organisations – for instance, by tying in the non-customs area more efficiently and disentangling the many different business interests – could go a long way to addressing these issues. Considering recent policy interest in trade facilitation, it is surprising how little research is taking place. The case for trade facilitation for most proponents is self-explanatory. Trade transaction costs are a waste and should be avoided. However, the obstacles and forces inhibiting the implementation of trade facilitation are far less understood.

References

ASEAN 2005, Agreement to establish and implement the ASEAN Single Window, Kuala Lumpur, 9 December 2005, viewed 22 February 2008, http://www.aseansec.org/18005.htm.

Browning, D 2003, 'Trade facilitation policy and new security initiatives', in UNECE (Ed.) *Sharing the gains of globalization in the new security environment*, United Nations, Geneva, pp. 169-178.

Butterly, T 2003, 'Trade facilitation in a global trade environment', in UNECE (Ed.) *Trade facilitation: the challenges for growth and development*, United Nations, Geneva.

COM(2003)452 final 2003, Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee – a simple and paperless environment for customs and trade, European Commission, Brussels.

Grainger, A 2007a, 'Supply chain security: adding to a complex operational and institutional environment', *World Customs Journal*, vol. 1, no. 2, pp. 17-29.

Grainger, A 2007b, Trade Facilitation and Supply Chain Management: a case study at the interface between business and government, Birkbeck, University of London, PhD.

Grainger, A 2007c, *Trade facilitation: a review (Working Paper)*, Trade Facilitation Consulting Ltd, www.tradefacilitation.co.uk.

Grainger, A [2008] forthcoming, *Trade facilitation and import-export procedures in the EU*, European Parliament, Brussels.

ICC 1999, *Incoterms 2000: ICC Official Rules for the Interpretation of Trade Terms*, International Chamber of Commerce, Paris.

OECD 2003, Quantitative assessment of the benefits of trade facilitation, Working Party of the Trade Committee, OECD, Paris.

OECD & WTO 2007, Aid for trade at a glance, 1st global review (Executive Summary), WTO, Geneva.

Raven, J 2005, A trade and transport facilitation toolkit: audit, analysis and remedial action, World Bank, Washington, DC.

TAXUD/477/2004 2007, *Electronic customs multi-annual strategic plan, 2007 Yearly Revision (MASP Rev. 8) – Working Document*, viewed 7 February 2008, http://ec.europa.eu/taxation_customs/resources/documents/customs/policy issues/e-customs initiative/MASP rev8.pdf.

Teo, H-H, Tan, BCY & Wei, K-K 1997, 'Organizational transformation using electronic data interchange: the case of TradeNet in Singapore', *Journal of Management Information Systems*, vol. 13, no. 4, pp. 139-166.

TIR 2005, *The TIR Convention*, 1975 – (2005 version).

UN ESCAP 2004, ESCAP Trade facilitation framework: a guiding tool, UN, Bangkok.

UN/CEFACT 1974, Recommendation No 4 – National Trade Facilitation Bodies CEFACT, UN, Geneva.

UN/CEFACT 2004, Recommendation No. 33: Single Window Recommendation CEFACT, UN, Geneva

UN/CEFACT & UNCTAD 2002, Compendium of Trade Facilitation Recommendations, UN/CEFACT, UN, Geneva.

UNECE 2006a, *Dangerous goods and special cargos*, viewed 22 February 2008, http://www.unece.org/trans/danger/danger.htm.

UNECE 2006b, *Working Party* 7, viewed 6 October 2006, http://www.unece.org/trade/agr/welcome.htm.

Verwaal, E & Donkers, B 2002, 'Firm size and export intensity: solving an empirical puzzle', *Journal of International Business Studies*, vol. 33, no. 3, pp. 603-613.

Verwaal, E & Donkers, B 2003, 'Customs-related transaction costs, firm size and international trade intensity', *Small Business Economics*, vol. 21, no. 3, pp. 257-271.

WCO 1999, Revised Kyoto Convention: International Convention on the Simplification and Harmonization of Customs Procedures, WCO, Brussels.

WCO 2005, Framework of standards to secure and facilitate global trade, WCO, Brussels.

WCO 2006, 'WCO Revised Kyoto Convention enters into force', WCO Press Release, WCO, Brussels.

International Network of Customs Universities

WCO 2007, WCO SAFE Framework of Standards, WCO, Brussels.

Widdowson, D & World Bank 2007, WTO negotiations on trade facilitation self assessment guide, Negotiating Group on Trade Facilitation, WTO, Geneva.

Wilson, JS, Mann, CL & Otsuki, T 2004, 'Assessing the Potential Benefit of Trade Facilitation: A Global Perspective' *Policy Research Working Papers*, World Bank, Washington, DC.

WTO 1998, WTO: a training package: what is trade facilitation?, viewed 2 August 2006, http://www.wto.org/english/thewto e/whatis e/eol/e/wto02/wto2 69.htm#note2.

WTO 2005, Report (2005) of the Committee on Regional Trade Agreements to the Council, WTO, Geneva.

WTO/OECD 2008, Doha Development Agenda Trade Capacity Building Database (TCBDB), WTO, Geneva.

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