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The Impact of Information Technology in Trade Facilitation on Small and Medium Enterprises in the Philippines

By

Loreli C. de Dios*

The Asia-Pacific Research and Training Network on Trade (ARTNeT) is aimed at building regional trade policy and facilitation research capacity in developing countries. The ARTNeT Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about trade issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. ARTNeT working papers are available online at www.artnetontrade.org. All material in the working papers may be freely quoted or reprinted, but acknowledgment is requested, together with a copy of the publication containing the quotation or reprint. The use of the working papers for any commercial purpose, including resale, is prohibited.

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Executive Summary

Focusing on electronic lodgment through web-based applications of value-added service providers as the IT-based trade facilitation measure, the survey of Customs Brokers conducted in this study revealed that lodgment time in the Philippines dropped to one hour or less as a result, compared to previous lodgment times of ½ to one day. However, total clearance time of 1-2 days remained unchanged, implying that manually performed tasks within the lodgment-to-clearance interval may be slowing down overall procedures.

Electronic lodgment allows registered clients to use any computer with internet connectivity, making it easily accessible. Prior to this, importers/brokers had to go to the EEC for lodgment or be EDI- or DTI-enabled, the investment and maintenance costs of which deterred usage. Similarly, the EDI-capable requirement for SGL users limited its accessibility, so that its full trade facilitating impact could not be realized. SGL conditions precluded SMEs from participating, putting them at a further disadvantage. Electronic lodgment now makes it easier and cheaper for all importers/brokers, regardless of size, to file entries. Since small importers account for over half of the 800,000 import entries lodged annually, the number benefiting from electronic lodgment is substantial.

In the face of the global economic downturn that has depressed trade everywhere, SME trading capacity is likely to have been affected more by poor demand than by access, technology, other size-related, or procedural difficulties. For 90 percent of survey respondents, most of which are SMEs, web-based lodgment made transacting convenient and efficient, lowered time and resource expenditures, or ensured reliable information. Since compliance costs for SMEs are disproportionate to their size, these benefits translate into lower unit operational costs and total cost burdens that make them more competitive. Considering that the export industry grew in the face of global recession, that majority of exporters are SMEs and their share in export revenue is not insubstantial, and export share in GNP is large and growing, the contribution of SMEs to exports is enhanced by lower transactions costs that mitigate the impact of depressed demand.

The main difficulty encountered by respondents in adapting to electronic lodgment is poor connectivity and frequency of server breakdown, a result of inadequate infrastructure or systems. Insufficient preparation by the government is perceived to have hampered implementation of IT-based measures. System improvements with the greatest impact would be adjustments to accommodate peak hour traffic and 24/7 server availability. The infrastructure should be set up in all ports. Updated and clear guidelines must also be immediately provided in view of fast changing procedures.

The study finally recommends some IT-based interventions along the transaction chain to facilitate SME participation in trade: (a) complete the computerization improvement program in all ports; (b) address the constraints occurring prior to lodgment and during the lodgment-to-clearance interval, especially those amenable to IT solutions; (c) implement fully a National Single Window, which requires that difficulties on the ground must be confronted by decision-makers.

I. Introduction

This paper describes the impact of information technology (IT)-based trade facilitation measures on small- and medium- scale enterprises (SMEs) in the Philippines. The definition of SME varies across countries, and the Philippines adopts one that includes micro and cottage enterprises. Thus the government classifies establishments into four categories of micro/cottage (1-9 workforce with asset limit of P3 million), small (10-99 workers with asset limit of P15 million), medium (100-199 workers with asset limit of P100 million), and large (more than 200 workers and more than P100 million in assets). On this basis, micro/cottage enterprises have dominated the economy, accounting for 92 percent in 2006, with small and medium sized ones comprising another 7.3 and 0.4 percent of all enterprises, respectively; altogether MSMEs employ 70 percent of the total workforce (DTI 2009). A large concentration is found in the domestic sector, i.e. wholesale and retail trade, manufacturing, and hotels and restaurants, with 50 percent in wholesale and retail trade alone. An estimated 70 percent of 1000 firms engaged in exporting are SMEs (Berida 2008), SME exports made up 19 percent of SME output and 17 percent of industry exports (NSO 2003), and MSMEs accounted for 25 percent of the country's total exports revenue, mainly through subcontracting arrangements with large firms or as suppliers to export companies (DTI 2009).

Size is not the only factor that inhibits the internationalization of SMEs and their active participation in international trade. The Global Facilitation Partnership for Trade and Transport lists 14 barriers to internationalized SMEs¹ (GFPTT 2005). Size however makes SMEs more vulnerable to such barriers, i.e. many of the barriers are correlated with firm size. For instance, specific concerns of Philippine SMEs have to do with their difficulty accessing markets, finance, technology, and information, the widening technology gap, aside from their small and receding role and minimal share in industrial exports (Hernandez 2005). Of these major constraints, market access or supply chain efficiency is most affected by policies and procedures governing the movement of goods.

Trade facilitation 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". Such measures thus logically focus on requirements enforced by Customs, being the main border agency, although they include the requirements of other government entities that issue permits for particular goods, banks that accept payments, or transporters and cargo handlers, which are all subsumed under Customs' workflow.

SMEs are the main beneficiaries of trade facilitation because trade transactions costs fall disproportionately on them (UNECE 2003). Compliance with both direct and indirect transactions costs has been found to have an asymmetric effect on SMEs and little relationship with the value of goods they trade. Complicated trade procedures entail a greater need for manpower to undertake

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¹ These are namely: 1. lack of entrepreneurial, managerial and marketing skills, 2. bureaucracy and red tape, 3. lack of accessibility to information and knowledge, 4. difficulties accessing financial resources/lack of capital, 5. lack of accessibility to investment (technology, equipment, and knowhow), 6. non-conformity of standardization, lack of quality awareness and lack of mutual recognition schemes, 7. product and service range and usage differences, 8. language barriers and cultural differences, 9. risks in selling abroad, 10. competition of indigenous SMEs in foreign markets, 11. inadequate behavior of multinational companies against domestic SMEs/lack of government supply-supporting programs, 12. complexity of trade documentation including packaging and labelling, 13. lack of government incentives for internationalization of SMEs, and 14. inadequate intellectual property protection

² Such required data consists of commodity characteristics, origin and destination, transport details, permits and issuing agency, trader/broker/supplier information, valuation, payments and exemptions, packing information.

them, implying an adverse impact on SMEs because they typically do not have the manpower or their productivity in complying is low. Lengthy processing times affect the cost of money, a larger burden for small capital-deficient firms. Unpredictable or non-transparent rules and procedures put SMEs at a disadvantage as they need to spend extra resources to obtain information. Unreasonable border delays and demand for bribes to expedite the movement of goods exact costs that undermine their competitiveness. Since these costs do not vary with the value of output, they increase the unit operational costs of SMEs.

Information technology (IT) has an obvious significant role in simplifying and harmonizing border and administrative procedures that ultimately facilitate trade. Customs data validation, cargo inventory control, goods declaration processing, electronic notification of release, revenue accounting, and Customs enforcement readily benefit from IT. From the viewpoint of government, IT secures revenue collection through various means, e.g. reduction of fraud, remote access to information, improved reporting and collection of statistics, control of file transfers, automatic reconciliation of Customs declarations. Automation connects the regulatory authorities involved in trade. Paperless declarations save time that is better spent inspecting high-risk shipments. Prearrival clearance, risk analysis, and separation of release from clearance are made possible.

From the viewpoint of businesses, IT reduces the cost of doing business by raising the efficiency of Customs controls while ensuring the uniform application of legislation, and promotes transparency in the assessment of duties and taxes and predictability of clearance times. Automation reduces corruption by minimizing direct contact between Customs officers and traders and significantly lessening the potential negative impact of physical inspections. "ICT applications can reduce waiting times at border crossings and at ports, secure appropriate processing of fees and Customs duties, simplify formalities, and provide timely information to transport operators. ...(They) reduce transaction costs, enhance supply capacities, and increase global market access." (UNCTAD 2006a and 2006b).

Customs reform or modernization programs thus inevitably include automation, as it induces transparency, predictability and reliability, and allows alignment with international standards. Where other government agencies with border responsibilities such as the issuance of licenses and permits, granting of certificates (e.g. origin, compliance), and other related functions similarly adopt IT in their procedures, the trade facilitating impact is enhanced. Hence efforts towards national single windows and interactive feedback between customs and these agencies are likely to have a positive multiplier effect on efficiency.

Increased emphasis on the wider use of IT in promoting trade facilitation³ as reflected in many of the proposed measures in the WTO Negotiating Group on Trade Facilitation (NGTF) is therefore not unexpected. Considering that the transactions costs of complying with trade regulations and procedures are higher for smaller firms, this study attempts to ascertain whether the use of IT in trade facilitation inhibits or encourages the participation of Philippine SMEs in foreign trade.

The required information would have been collected through a survey of SMEs about their experience with Customs procedures. However, the establishment-level trade transactions

³ Trade facilitation in general can lead to (a) more efficient production and allocation of resources as TF increases competition through reduced transactions costs of trading, i.e. allowing increased efficiency in the use of existing resources, encouraging specialization and activities that reflect comparative advantage, and making use of scale economies through exports; and (b) cheaper consumption as TF reduces inefficiencies and obstacles to trade thereby lowering domestic prices. (UNECE 2003)

information necessary for sampling SMEs is either unavailable from the Bureau of Micro, Small and Medium Enterprise Development of the Department of Trade and Industry, or confidential in the case of the Bureau of Customs. The information was therefore collected from Customs brokers since: (a) an estimated 90 percent of importers, regardless of size or frequency of transaction, use Customs brokers to transact with the Bureau of Customs, hence brokers know how their clients are affected by procedural changes at the Bureau; (b) brokers make the necessary adjustments to procedural or system changes in order to maintain their clientele, such adjustments ultimately determining how easy or difficult it would be for their client to import/export; (c) the majority of brokers are SMEs themselves.

The next section describes the use of IT in cargo clearance as the core IT-based trade facilitation measure confronting SMEs within Customs automation and modernization programs. This is followed by a brief background on Customs brokers and the survey respondents in Section III.

Section IV discusses the results of the survey and the implied characteristics of SME traders. The discussion is guided by the following key questions: What IT-based trade facilitation measures are implemented in the Philippines? To what extent are they accessible and utilized, and by whom? What are the barriers to the use of these measures, particularly by SMEs and new/small traders? Did the operator/provider/regulator of these IT services undertake activities to reduce these difficulties and were these effective? Did the institution of these measures result in more trade and increased participation in trade by SMEs?

Conclusions and some recommendations are given in Section V, in answer to the questions: Which components of the IT-based trade facilitation measures along the transaction chain seem to be most important in facilitating SME participation in trade? What interventions related to their implementation may be required to ensure that the IT-based trade facilitation measures do not discriminate against the participation of SMEs in international trade? Additional information about Customs procedures and Customs brokerage are found in the annexes together with the survey instrument.

II. Use of Information Technology at the Bureau of Customs

The Bureau of Customs' first serious attempt at automation was through the installation of a mainframe computer system in 1976 for the purpose of capturing transactions data and generating databases of customs bonds, orders of payment, and customs declarations to inform management. The manifest clearance system remained up to the 1990s, encoding paper cargo manifests into electronic files for the posting of declarations and cargo claims and generation of shipment reports. From 1992 to 1998, a Customs Reform and Modernization Program was undertaken, initially to plug revenue leakages, and later broadened through a "Blueprint for Customs Development" to cover such objectives as a better business and investment environment, protecting public health and the environment, and streamlining the bureaucracy. Extensive use of information and communication technology was a major strategy, mainly to advance customs processes ahead of arrival of cargo, automate processes, and minimize human intervention. Systems and procedures were reengineered in the following ways: (1) processes were automated to reduce intervention in 80 percent of transactions; (2) controls were positioned at points where they would be most effective without obstructing business; (3) remote facilities were provided for lodging declarations; (4) paperless and cashless processes were introduced; (5) certain operations were privatized; (6) agencies participating in the system were linked electronically (Parayno 2004).

The IT system first covered cargo processing from the assessment and collection of duties, taxes, and fees, to control of cargo. This was achieved through the customization of the Automated System for Customs Data (ASYCUDA++) software developed by the UNCTAD, acquisition of computers and servers for the 21 ports across the country, and establishment of electronic links between them through a wide area network. Additional systems were eventually developed for payment and online release in coordination with banks and port operators, respectively. These were then integrated into the Automated Customs Operations System (ACOS), the first IT-based system at BOC that sought to automate the entire cargo clearance chain. By 1997 almost all segments of cargo clearance were fully automated and by 1998 the system was running at all major ports. BOC intended ACOS to have the following features:

- Selectivity. To speed up cargo release, only high-risk goods would be subjected to the usual controls because low-risk goods would be given immediate clearance. This would entail the application of risk management in identifying cargo that required further document examination and/or physical inspection.
- Post-entry audit. Delays in cargo movement would be avoided by postponing the
 exercise of some customs controls until after the goods had been released to the
 consignee. Shipments that would have otherwise required Customs intervention would
 be released after the satisfaction of guarantee requirements.
- Advanced processing. It would be possible to initiate the clearance process prior to the arrival of cargo to reduce lag time between the arrival and release of goods.
- Client self-assessment. Traders would be allowed to self-assess their duty and tax liability to facilitate clearance as well as preempt opportunities for customs personnel to exercise discretion in valuation.
- Electronic data interchange (EDI). Information technology would be deployed to eliminate face-to-face transactions between Customs and clients, minimize the time required for clearance, and provide convenience to traders. Thus it would be possible to carry out most transactions with Customs electronically.

Specifically, BOC introduced mandatory payment to banks as the first step in cargo clearance, and electronic lodgment of declarations through the Electronic Data Interchange (EDI) and Direct Trader Input (DTI) systems. Computers calculated and collected duties and taxes, determined payments made, issued release instructions for shipments to the cargo handler, and kept document receipts and releases by various offices. IT also selected shipments for examination and assigned the examining officer. For these, BOC established the online release system in cooperation with freight forwarders, electronic transmittal of payment data from banks to BOC in cooperation with the Philippine Banking Association, and advance submission of manifest information through port operators' computer systems and consolidators' data exchange center. Lodgment of declarations was privatized and transferred to the Philippine Chamber of Commerce and Industry (PCCI). Aside from the green lane processing and electronic manifest systems, there were secure and electronic transmittal of bank payments, automated matching of payments and payables, post-release review, and automated computation of payables.

A trade facilitation program called the Super Green Lane (SGL) was established in 2000 as a special customs clearance facility for the top tax-paying importers that would not compromise collections as well as generate service fees that would go to a trust fund to enhance the efficiency of Customs. SGL clients would require accreditation and EDI for entry lodgment via an authorized value-added network service provider. SGL shipments would be processed and cleared in advance and exempt from selectivity and physical or documentary checks, and a P2500 fee per declaration

charged (versus P40 for regular lane); however if required, the goods would be inspected after release at the importer's premises. To qualify for SGL treatment, shipments would have to be either in the pre-approved list of importables of the accredited importer or freely importable or covered by proper import licenses; declared under formal entry thus subject to duties and taxes; filed through EDI; and non-agricultural or requiring quarantine. To encourage the use of SGL, in 2003 the facility was opened to all importers who had transacted with BOC for at least one year and were willing to undergo post-entry audit, had good compliance records and regularity in importation, and fees were graduated depending on the FOB value of the shipment.

Thus by 2000 ACOS covered import processing with modules for electronic manifest, electronic encoding, assessment, selectivity, payment, and online release. Export documentation was added in 2001. A computerization improvement program was launched in 2005, consisting of 33 major components that include software upgrades to ASYCUDA World, an Imports and Assessment system, exports system, a transactional portal, resources and operations management system, and funds monitoring system. All of these are presently being developed.

Value added service providers (VASP) offered electronic data interchange services and web-based applications for traders to transact electronically with BOC. The PCCI managed the gateway infrastructure that connects the VASPs to BOC. VASP software allowed remote electronic filing and processing of import entry declarations, so that these were prepared offline, lodged by batch, and printed in Customs-prescribed format together with the final assessment notices. It also permitted electronic transmission of instructions to banks for payment of duties and taxes based on Customs assessment. However this software entailed a cost of subscription.

More recently, BOC embarked on an E2M (Electronic to Mobile) Customs Project (also referred to as E2M or e-Customs System) that seeks to speed up the release of cargo to within 30 minutes by making BOC services available on the internet and using mobile phone technology. E2M is envisioned to allow an end-to-end cargo clearance process covering electronic manifest, import entries (consumption, informal, warehousing, transshipment), bonds management, export documentation, online release, licensing and clearance, hold and alert, selectivity, and payment. E2M consists of enhancements to the current system: online submission of declarations and manifests, automatic advice on declaration status, use of VASPs, automated process for other import transactions (informal, warehousing, transshipment) and for liquidation of raw materials, centralized management of bonds transactions, links with government agencies, online access through the BOC website.

Up to late 2007, import entry declarations could be filed using any of 4 modes at ports where the ACOS⁴ is in operation: (a) manually by bringing paper forms for digitization to Entry Encoding Centers (EEC) stationed at the port; (b) DTI that required companies to lease telecommunications lines to connect to BOC through the PCCI-managed gateway; (c) EDI of accredited value-added network (VAN) service providers; (d) web-based applications of these providers that entailed subscription. Less than 10 percent used the latter 3 modes owing to the costs involved, and DTI subscribers stopped using the facility early on (Abrenica 2006). The EECs, which handled 91 percent of the entries, were the main transformation point to digitized form for submission to ACOS. The entry encoding service contract was awarded to the PCCI in 1995, under which all importers were required to have their import entry declarations converted

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⁴ As of 2001 all 15 collection districts were ACOS-enabled, i.e. Port of Manila, Manila International Container Port, Ninoy Aquino International Airport, Davao, Cebu, Cagayan de Oro, Subic, Legazpi, Batangas, San Fernando, Zamboanga, Surigao, Iloilo, Tacloban, Clark, while the 3 subports of Gen. Santos, Iligan, Mactan out of 37 had ACOS (Co, et al. 2006, p.111).

into electronic files by the EEC. BOC rented out a site for the community trade center that housed the EEC and software, while PCCI provided site development, encoders, equipment, support and maintenance, the investment costs for which were deducted from the rent. PCCI charged a P40 encoding fee per entry; about 800,000 entries were processed yearly. For ports not equipped with ACOS, entries are lodged at the Entry Processing Division or equivalent unit and provisions pertaining to ACOS and Selectivity do not apply.

In line with the E2M Customs Project and to provide for a smooth transition from EEC to an internet-based lodgment and clearance process for import and export entries, BOC adopted the use of VASPs in January 2007 to deliver front-end IT services and link the transacting public to it. VASPs were accredited⁵ to provide the following services:

- registration of BOC clients
- lodgment of import declarations (Consumption, Warehousing, Transshipment, and Informal)
- lodgment of export declarations
- transmission of raw materials liquidation information
- transmission of surety bonds information
- transmission of payment information
- transmission of online release information

BOC provides and operates the gateway, which is the sole connection of VASPs to the BOC e-Customs System for this purpose. BOC clients are connected to the gateway via the accredited VASP of their choice. These VASPs developed front-end IT systems and set up the necessary infrastructure and telecommunications facilities to allow electronic transactions. VASP facilities are available to duly registered importers, exporters and their designated brokers. VASPs also facilitate submission by freight forwarders, consolidators and brokers of inbound manifest data to BOC, and maintain a portal for traders to track containers, flight schedules and cargo reservations and obtain advice on release instructions from BOC.

Cargo Clearance Procedures⁶

There are 4 sets of clearance procedures for cargo entering the Philippines: (a) formal entry, for imports for consumption or home use whose FOB value exceeds \$500, (b) informal entry, for imports with FOB value less than \$500, (c) warehousing entry, for imports stored in Customs bonded warehouses, and (d) transshipment. Procedures for formal entry are automated, those for warehousing entry only partially automated, while those for informal and transshipment entry are manual. Formal entries are now filed using the web-based applications of the VASPs.

The following are the general procedures for formal entry where ACOS is available; there may be minor differences between ports. These are applied at seaports, where the majority of cargo is cleared. Italicization indicates those steps that involve IT. The flowchart is found in Annex 1, which applies to full-container-load cargo.

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⁵ Currently there are 3 accredited VASPs: (1) Cargo Data Exchange Center Inc. or CDEC, (2) E-Konek Pilipinas Inc., and (3) Intercommerce Network Services Inc. or INS.

⁶ Based on Abrenica (2006, p.30).

- (i) Pre-numbered Import Entry and Internal Revenue Declaration (IEIRD) forms and documentary stamps are purchased by the importer/broker from the Administrative Division of BOC.
- (ii) The importer/broker fills up the IEIRD form, computes the applicable taxes and duties, and remits payment to an authorized bank.
- (iii) On receipt of payment, the bank performs two steps. It "check-writes" the original copy of the IEIRD form to reflect the amount of payment received, and sends a notice of receipt of payment to BOC through the Philippine Clearing House Corporation (PCHC) facility.
- (iv) The importer/broker verifies if the form has a check-write and lodges the IEIRD through the web-based application of his VASP. No import entry is accepted without the check-write.
- (v) Once encoded, the import entry data is sent to ACOS, which responds with the outcome of the selection process. The selectivity system determines which channel of processing is to be applied on the import entry: green for immediate release; yellow if documentary review is necessary prior to release; and red if documentary review and physical examination are required.
- (vi) The importer/broker prints out the ACOS response, called the Temporary Assessment Notice (TAN).
- (vii) The importer/broker submits the TAN and import documents to the Entry Processing Unit (EPU) of BOC, which segregates the documents according to the selection results. Import entries that have been selected green are sent to the Collection Division; those selected yellow and red are sent to the Formal Entry Division (FED).
- (viii) At the FED, there are 21 sections, each assigned to specific types of commodities identified through their HS code. The documents are received by the relevant commodity section. The section clerk manually logs all documents received and forwards them to the head of the section.
- (ix) The section head assigns a Customs Operations Officer (COO III) to review the entry.
- (x) The assigned COO III retrieves the entry from ACOS and reviews it. If a physical examination is required, a report of findings is written in the IEIRD form. Otherwise, the officer reviews the documents and requests the importer/broker to present additional documents if necessary. The officer writes his evaluation on the IEIRD form and forwards it to the COO V.
- (xi) The COO V reviews the evaluation of the COO III, and encodes the findings of the COO III in ACOS, if he concurs with them. Only the COO V is authorized to make the entry amendment in the system. The entry is then technically "rerouted" to the green lane, i.e., ACOS assesses the amended declaration and determines the duties and taxes due. A registration and assessment number for the entry and an assessment notice are automatically generated by ACOS. At this stage, the entry is considered to have been "assessed."
- (xii) The COO V prints the assessment notice and attaches it to the import declaration documents. The documents are then hand-carried by a messenger to the Collection Division.

- (xiii) At the Collection Division, a clerk downloads the encrypted file from the PCHC network, decrypts the file, prints the electronic abstract of payment, and uploads the decrypted file to the Payment System.
- (xiv) ACOS automatically downloads the assessed file through the Automated Matching of Payments and Payables (AMPP) System, which is the interface between ACOS and the Payment System, and this in turn uploads it to the latter.
- (xv) The Payment System matches the assessed file downloaded from ACOS with the decrypted payment file received from the banks through the PCHC. If the payment matches the assessed duties and taxes, the Payment System converts the matched file to a flat file and sends it back to ACOS using another interface called the Online Release System (OLRS).
- (xvi) A release instruction is automatically generated by ACOS and transmitted to the port operator/arrastre.
- (xvii) The port operator's system matches the release instruction received from BOC with its Arrival of Goods database using the bill of lading number as reference key. If it matches, the system sends a feedback message to BOC. The feedback message is uploaded to ACOS using the OLRS interface. ACOS automatically updates the status of the import entry from "paid" to "release".
- (xviii) The importer/broker checks the ACOS Verification Counter at the office of the port operator to determine if the entry has been cleared by BOC and may be released.
- (xix) The importer/broker pays the arrastre and wharfage fees to the port operator. The port operator issues an official receipt for arrastre fee, while the Philippine Port Authority (PPA) issues its own receipt for the wharfage fee. The Data Control Officer of the port operator issues an Equipment Interchange Receipt (EIR), also called Container Interchange Receipt (CIR), which indicates the condition of the container that will be turned over to the importer.
- (xx) The shipping line issues the delivery order (DO) and sends a message to BOC lifting its hold on the cargo through the OLRS.
- (xxi) The importer/broker verifies the container details against the EIR at the common video terminal of the port operator.
- (xxii) The importer/broker arranges for a truck to carry the container out of the port. The trucker presents the EIR and DO to the gatekeeper.
- (xxiii) At the gate, the gatekeeper of the port operator scans the EIR and checks the DO.
- (xxiv) The yard equipment operator, upon presentation of the EIR, checks the container location using a radio data terminal. The container is loaded on the truck chassis.
- (xxv) As it exits the port, the trucker presents the EIR to the gatekeeper who then scans it to record the actual release of goods.

Cargo may be in full-container load (FCL) or less-than-full-container load (LCL). The latter entails a few more procedures compared to the former since the port operator would have to establish the volume of the cargo and check this against the cargo description in the OLRS message of BOC.

Client Profile Registration System

At the heart of this process is the recently implemented Client Profile Registration System (CPRS), a prerequisite for clients to transact with BOC by electronic means. It is an internet-enabled application under the E2M Customs project. The CPRS replaces the manual submission of application forms and documentary requirements for client accreditation, and electronically validates and stores these in a central database, then automatically notifies clients on renewals due. Clients identify the VASP of their choice and provide their company profile. When their registration is approved, the CPRS issues permanent Customs Client Numbers and digital signatures needed for any e-document to be accepted. Clients use these numbers to register with their bank, which in turn sends bank reference numbers to the CPRS.

All clients and stakeholders are required to register under the CPRS annually, especially those who need to submit electronic documents for clearance of inbound and outbound goods or move these from one jurisdiction to another. These include importers, exporters, customs brokers, surety companies, port operators, warehouses, sheds and wharves being used by BOC as temporary storage and clearance facilities for imported goods, airport transit facilities and off-dock Container Yard /Container Freight Station (CY/CFS), which must directly register with CPRS. Other entities transacting with BOC, e.g. airlines, shipping lines, exporters, arrastre operators, authorized agent banks, forwarders and consolidators, will register with the CPRS through the accrediting government agencies. E2M systems will depend on the CPRS in validating clients' transactions.

Importers and brokers registering under the CPRS are accredited by the Customs Accreditation Secretariat; warehouse operators by the Assessment and Operations Customs Group's Customs Bonded Warehouse Committee; surety companies by the Revenue Collection Monitoring Group; and CY/CFS operators by the Office of the Commissioner.

BOC clients that are accredited by BOC offices must apply and register through their VASP. Brokers must register ahead of importers, since their Customs Client Number (CCN) is a requirement for the latter to register. Registration for brokers follows these steps: (a) lodgment of broker's CPRS profile through the VASP, (b) receipt by the Customs Accreditation Secretariat of the accreditation application and required documents, (c) approval of the submitted profile, (d) email notification by the system with attached Certificate of Registration indicating the assigned Customs Client Number. Registration for importers is as follows: (a) importer lodges his CPRS profile via the VASP, indicating his nominated broker by encoding the broker's CCN, (b) Customs Accreditation Secretariat approves the submitted profile, (c) system generates an email with an attached Certificate of Registration indicating the assigned Customs Client Number as proof of accreditation.

Clients whose accreditation under the manual procedures have not expired must lodge their profile in the CPRS. This submission is part of the registration process under the Imports and Assessment System. Newly accredited stakeholders must do the same. An importer/broker may start lodging import entries only after they have obtained their Certificate of Registration with Customs Client Number and Bank Reference Number from their nominated authorized agent bank, which is issued only after presentation of the Certificate of Registration.

⁷ From Information on the BOC Client Profile Registration System (as of Jan 2009): Frequently Asked Questions.

Warehousing entry procedures differ from formal entry mainly in that they do not require payment of duties and taxes but a bond posted by the importer/broker to be liquidated if the goods are taken out of the Customs bonded warehouse either for re-export or domestic consumption. From the EPU, green lane entries are sent to the Bonds Division, while red and yellow lane entries are first sent to the Warehousing Assessment Division and then rerouted to the green lane if satisfactory. The bond is applied against the cargo, the transaction is posted, quota balances of the importer/broker verified, and the declared import commodity is checked against the list of imports that may be placed in the designated bonded warehouse, to which the cargo is moved.

III. Profile of Customs Brokerage and Survey Respondents

Customs brokers have been in operation since the early years of the Philippine Customs Service⁸ although their role was not explicitly defined in the tariff law of the time, nor did they operate as a distinct profession nor train formally in tariff and customs matters since these were only learned from experience. Most imports were handled by importers themselves. Through the years, as the need to know the complicated tariff structure and import procedures increased with import requirements, importers sought the services of brokers because of their accumulated expertise on these matters. It was also cost-efficient for most importers who imported infrequently, did not have the resources to maintain full-time experts, and did not want to risk making errors in their declaration. Although the use of their services was not mandatory, brokers' operations came under Customs administrative orders approved by the Department of Finance. Sometime around the end of World War II, the Bureau of Customs instituted an accreditation examination for brokers, as their task in the import process had become established. This consisted mainly of (a) receipt of shipping documents, bill of lading, invoice, and packing list, and (b) preparation of the entry or internal revenue declaration describing the article, its value and weight, and the estimated tariff and duties. Thus, brokers had a dual obligation of representing the importer while protecting government revenue.

Customs brokering became a profession in 1957, when Republic Act 1937 or the Tariff and Customs Code was passed. This put into law the licensure examination for a broker to be registered and practice the profession. Thus, brokers were recognized as professionals, defined in the Philippine context as persons who have passed a licensure examination conducted by the Professional Regulation Commission. According to the Chamber of Customs Brokers, this set apart Philippine Customs brokers from their counterparts in other countries where examinations to become customs brokers are conducted by the Customs administration. This law also specified the academic requirements to be the completion of a four-year collegiate course with at least 18 academic units in tariff and customs and/or taxation, substitutable by actual experience on customs brokerage and tariff and related matters. Nevertheless, it still allowed the importer, any other holder of the bill of lading, customs broker acting under authority from the holder of the bill of

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⁸ The Philippine Customs Service was constituted in 1902 although the Customs Service of Manila was established as early as 1573 by the Spaniards and existed continuously up to the late 1800s with a brief interruption right before the Americans came in 1898 and reopened it. The Philippine Commission adopted the Tariff Act of 1902 and a Customs Service Act was passed in the same year, making the Philippine Customs Service a counterpart of the American Customs Service. Later it became the Bureau of Customs and Immigration under the supervision of the Department of Finance and Justice. The latter was split and Customs remained under the Department of Finance. In 1957 Republic Act No. 1937 or the Tariff and Customs Code of the Philippines was enacted, the first official expression of an autonomous tariff policy.

⁹ This is based on an interview with Atty. Armand Padilla, one of the earliest accredited Customs brokers who began practicing in 1954.

lading, or agent or attorney in fact for such holder, to make the import entry. Corporations, associations, or partnerships could also engage in customs brokering as a business, and would obtain licenses from the Bureau of Customs for them to operate as Customshouse brokers.

By this time an estimated 90 percent of importers made use of brokers, due to the facility afforded by their services. Large companies that undertook regular import transactions employed in-house brokers and offered brokerage services themselves. Over the years multinational corporations that had forwarding and cargo departments, set up their own brokerage arms, a trend followed by shipping lines and logistics companies. Some offered not only cargo clearance but delivery of the shipment as well, while consolidated service companies comprehensively covered loading at the port of origin up to delivery to the importer's premises. Brokers also specialized in types of commodities such as foodstuffs, chemicals, textiles, paper products, and machinery, in view of the wide variation in tariffs across sub-types or quality of the commodity. Brokers' roles expanded even more with the implementation of the WTO Transaction Valuation system, as well as the establishment of bonded warehouses and other industry incentives that have an impact on dutiable values.

In 2004 the first law specific to Customs Brokers, Republic Act 9280 or the Customs Brokers Act, was passed to regulate the practice of the Customs broker profession, creating a Professional Regulatory Board for Customs Brokers for the purpose. The law standardizes customs administration education, provides for licensure examination and registration, and supervises and controls the practice. The academic requirement to take the licensure examination is a Bachelor's degree in customs administration, while holders of Master's degrees in customs administration are qualified within 5 years from the effectivity of the law. The new law imposes a highly specialized course requirement, in contrast to the old one.

RA9280 also specifies that documents shall be signed ¹⁰ only by customs brokers, except brokers who are under the employ of companies. It disallows agents or attorneys-in-fact from transacting business at the Bureau of Customs. Brokers are prohibited from advancing and financing the payment of any duties and taxes and any other charges on behalf of their clients. Corporate practice or the direct or indirect practice by juridical persons/entities such as corporations of the profession is also forbidden, and Customs broker licenses to practice may be issued only to natural persons. The new law however does not proscribe brokers from forming professional partnerships to practice their profession.

Amendments to the new law are under discussion, mainly with respect to the abovementioned provisions considered objectionable by various stakeholders, that is, (a) scope of practice of licensed customs brokers and their exclusive right to sign entry and export declarations, (b) prohibition against corporate practice, and (c) prohibition against financing of payments; as well as the varied interpretations by the implementing rules and regulations and Customs administrative orders. At the time of the study, the provisions of the previous law were being enforced pending the resolution of these issues.

At present there are around 4800 brokers licensed by the Professional Regulation Commission, of which 1700 have been accredited by the Bureau of Customs as of 2006. The Chamber of Customs Brokers is the national accredited organization and has more than 3000

¹⁰ Republic Act 8792 or the E-Commerce Law of 2000 provides for legal recognition of electronic documents and signatures.

members engaged in brokerage either as individual professionals, in partnership with other customs brokers, or as principal or alternate customs brokers of brokerage companies.

A total of 67 licensed Customs brokers responded to the survey conducted for this study. The majority have brokerage companies either as a partner or sole proprietor. About 6 are in freight forwarding and logistics as well, and the same number hold offices outside Metro Manila. A profile of their experience, employment, and client size is shown in Tables 1 and 2. Average years in the brokerage profession is 12, with half of them relatively new compared to this average. They typically employed 12 persons and had 7 clients, with 4 employing more than 50 and one having 100 clients. Taking employment size as a proxy for firm size, most (60%) of the respondents are small companies with a small number of clients, i.e. SMEs. Clients could of course range from large corporations to small irregular importers, and their import transactions could be few in number but large in value as well as the reverse. Hence there are extreme cases of companies that employ a few but have a large number of clients, or employ many but have few clients. Those with no reported employees or regular clients of their own are just starting out in the profession.

Table 1: Respondents' profile

	Years in Brokerage	Number of Employees	Number of Clients
Average	12	12	7
Range: low, high	1, 50	0, 250	0, 100
Up to 9	n= 36		
10 to 19	n= 10		
20 and over	n= 20		

Table 2: Distribution of respondents by number of employees and typical client size

Number of Employees	Typical client size					
	0	1 to 9	10 to 19	20 and over	TOTAL	
0	4	4			8	
1 to 9		40	4		44	
10 to 19		4	2	1	7	
20 to 70		2		4	6	
250			1		1	
TOTAL	4	50	7	5	66	

Assembling the survey data according to number of employees as an indicator of company size, Table 3 shows that almost half (48%) of all respondents lodged entries on a weekly basis and filed 4 entry declarations per week on the average. Most of these weekly filers consist of companies with one to nine employees, and lodged 4 entries weekly. One-fourth lodged entries daily, averaging 6 entry declarations per day. Companies with numerous employees tend to lodge more frequently or file more entries weekly. Entry lodgments on a monthly basis were calculated from the respondents' actual monthly estimates as well as extrapolated from their daily/weekly figures. The monthly averages show that large brokers file more than triple the number of entries

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¹¹ One respondent was excluded from this table for lack of such information but was included in the rest of the tabulations. A number of respondents did not provide answers to all the questions, hence the varying totals in the tables that follow.

that small brokers file. In general, 38 entries were lodged every month regardless of employment size.

Table 3: Frequency of entry lodgment by employment size

Number of	Brokers that lodge daily		Brokers that	t lodge weekly	Average # of
Employees	Number	Average # of	Number	Average # of	entries lodged
	of brokers	entries lodged	of brokers	entries lodged	per month
0			5	2	7
1 to 9	8	7	23	4	32
10 to 19	4	3	2	16	36
20 and over	5	8	2	6	104
(excl 250)	(4)	(8)			(85)
Total	17	6	32	4	38
(excl 250)	(16)	(6)			(35)
Range		2, 30		1, 28	2,600

The tabulation based on size of clientele below shows the same pattern as the one above. The only difference is the weekly average lodgments of brokers with numerous clients, which at 19 per week is the highest among the categories, compared to the low (6 entries) weekly average of brokers with numerous employees.

Table 4: Frequency of entry lodgment by client size

Number of	Brokers that lodge daily		Brokers that	t lodge weekly	Average # of
clients	Number	Average # of	Number	Average # of	entries lodged
	of brokers	entries lodged	of brokers	entries lodged	per month
0			2	3	8
Up to 9	8	6	26	3	28
10 to 19	5	4	2	10	62
20 and over	4	8	2	19	115
(excl 100)	(3)	(7)			(86)
Total	17	6	32	4	38
(excl 100)	(16)	(6)			(35)
Range		2, 30		1, 28	2,600

IV. Survey Results and Discussion

Section II described the various IT-based procedures at the Bureau of Customs. For purposes of gauging whether any improvement in the survey respondents' operations was directly attributable to an IT-based measure, the study focused on the electronic lodgment of import entry declarations through the web-based applications of the VASPs, referring in particular to the fourth step in the cargo clearance process outlined in Section II and excluding the preparatory steps of obtaining the relevant documents. Web-based lodgment through the VASPs started in October 2007, replacing the previous modes of entry submission, i.e. manually through the EECs, and

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¹² Such as the commercial invoice, bill of lading or airway bill, packing list, ATRIG, certificate of origin, health certificate, licenses/permits/clearances, among others. The import entry is also referred to as the Single Administrative Document or SAD.

electronically through the EDI-VAN and DTI. The EECs, which served 91 percent of importers/brokers, were phased out starting with the major ports in the last quarter of 2007, while use of the other modes was constrained by high costs to begin with. Separating web-based lodgment through VASPs from previous automation efforts is useful in order to establish the connection with SMEs, which has not yet been studied. It also allows for better recall by respondents, recognizing that the timing of the survey with the trade-depressing global recession makes it difficult to establish benefits clearly.

Lodgment of entries through VASPs was stipulated by Customs Administrative Order 2-2007 in January 2007 and by Customs Memorandum Order 19-2007¹³ in July 2007, taking effect upon the issuance of port-specific directives indicating the date it is to be implemented. The order covers consumption and warehousing entries or Phase 1 of the implementation of the E-Customs System. It specifies VASP tasks to include: validation of captured entry declaration data from importers and brokers in accordance with the validation rules to be provided by BOC; conversion of data to XML format that is compatible with the requirements of the BOC-VASP gateway; receipt of error or status messages from the gateway; notification of clients of such messages such as status of lodgment, disposition of the entry, advance duty payment, final payment, statement of settlement of duties and taxes, release.

Under this mode of submission, the entries get registered in the ACOS/ASYCUDA database. This is currently done at 11¹⁴ out of 17 ports, including the 3 major ports in Manila that handle more than 50 percent of total imports. The newer scheme called the E2M Imports and Assessment System (IAS) is also done through web-based applications of the VASPs but entries get lodged instead to the IAS¹⁵. This was implemented initially in 3 provincial ports¹⁶ and will be rolled out to the other ports before the end of 2009. Both have basically the same workflows except for the payment of duties and taxes which is done prior to the filing of the declaration under ACOS, and at the final assessment stage through a debit of the importer's bank account under E2M-IAS; thus under the latter there is no forced matching of payment with assessment nor a second payment for deficiencies.

The requirement to lodge declarations electronically was formalized under Customs Memorandum Order 40-2008 of March 2009 that imposes sanctions for non-compliance. It covers all kinds of goods declarations for imports, exports, transshipment, transit and other transactions under the E2M Customs Project, although implementation will be in phases, starting with formal entries for consumption and warehousing. Manual processing is not allowed except when there is a computer systems breakdown, power failure that renders the system non-operational, or in authorized cases accompanied by a clearance from the Commissioner. However such shipments shall still be electronically lodged when practicable. Failure to comply with any of these is a ground for suspension of accreditation.

To be eligible for IAS, importers/brokers must have (a) a valid and active Client Customs Number from the CPRS, (b) bank account information and bank reference numbers for payment of duties and taxes, (c) appropriate licenses/clearances/permits from the relevant agencies, (d)

¹³ Annex 2

¹⁴ Namely the Port of Manila, Manila International Container Port, Ninoy Aquino International Airport, Cebu, Davao, Clark, Subic, Batangas, Limay, Mariveles, and Cagayan de Oro. E-lodgment is not available in the ports of San Fernando, Legazpi, Tacloban, Iloilo, Zamboanga, Surigao.

¹⁵ IAS is a set of application components that handles the flow of import processing which includes electronic manifest clearance, import declaration entry, risk assessment, regulatory clearances and release of cargo.

¹⁶ Batangas, Limay, and Mariveles

applicable non-cash payment instruments, and (e) other supporting documents. The procedures flow as follows: (1) Port Operations/Inspection Division encodes the arrival schedule, (2) shipping lines and consolidators submit the electronic manifests and bills of lading through their VASP prior to the arrival of the vessel, (3) importers/brokers secure licenses to import regulated or prohibited goods, (4) importers/brokers file their Single Administrative Document giving bank account information and non-cash instructions electronically through their VASP, (5) Port Assessment Division examines, appraises, and performs final assessment of the entry and cargo declaration, (6) E2M System sends payment instructions to the importers/ bank for debiting the final payment from their account, (7) importers/brokers receive an electronic Statement of Settlement of Duties and Taxes from BOC through the VASP, (8) E2M System generates and transmits online release instruction to the temporary storage facility for the final release of cargo (BOC 2009). Department of Finance/Bureau of Internal Revenue must also submit electronically a Tax Exemption Certificate and Authority to Release Imported Goods to BOC.

One of the objectives of electronic lodgment is to promote "paperless" transactions. Under present circumstances, paper versions of the IEIRD and support documents must still be submitted for green, yellow, and red lane processing prior to the release of their shipments, while for SGL entries the IEIRD and supporting documents must be submitted after release of the shipment.

Accessibility/utilization of IT-based trade facilitation measures, and barriers to the use of these measures, particularly by SMEs

Respondents' manner of filing entries are shown in Table 5. The majority (82%) use their own computer, with one-third (33%) of the total using it exclusively. Two-thirds (64%) use other terminals, with more than a tenth (11%) of the total using these solely. Slightly more than half (52%) use both their own and other terminals.

Table 5: Method of entry lodgment

Number of	Manual	Electro	Electronic				
employees		Total	Using o	wn computer	Using o	ther terminals (VASP,
					CCBI, F	PUC, cafe, enco	der)
			Total	Exclusively	Total	Exclusively	other
				own computer		terminals	
0	2	6	+7	1	7	1	
1 to 9	1	23	8 + 26	13	29	6	
10 to 19		2	+6	4	3	1	
20 to 70		4	+7	3	4		
250			1	1			
TOTAL	3	35	55	22	43	8	

Most (82%) respondents in Table 6 have their own computer with internet connectivity at least; a smaller proportion also have software that computes taxes due. Almost a fifth (18%) do not have their own IT system, consisting of small brokers with zero to nine employees. About three-fourths (70%) did not invest in any IT system, either because they do no not need any as they already have one, or are not able to.

VASPs charge P45 to P60 per lodgment, and this is shouldered by brokers rather than by their clients.

Table 6: Ownership of IT System

Number of	Does not	Has own com	Has own computer/IT system with:				
employees	have own	Internet	Software that	System with			
	IT system	connectivity	computes tax due	e-purchase			
0	5	4			6		
1 to 9	7	36	6		34		
10 to 19		7	3		4		
20 to 70		7	2	2	3		
250		1	1	1			
TOTAL	12	55	12	3	47		

Around one-third (30%) invested in IT as a direct result of the electronic submission requirement, as Table 7 shows. These took the form of computer units purchased, capital expenditures ranging from P30000 to P1000000, or subscription to a service provider for internet access ranging from P900 to P5600 a month.

Table 7: IT investment due to electronic lodgment

Number of	Invested in IT	Examples of IT investments			
employees	because of	Average number	Capital	Subscription	
	electronic lodgment	of computer units	expenditure		
0	3		P30K	P900/month	
1 to 9	9	1 unit	P35K	P1000/month;	
				DSL upgrade	
10 to 19	3		P100K	P5600/month	
20 to 70	4	2 units	P50K; P1M		
250	1				
TOTAL	20				

Aside from investing in IT systems, brokers adapted to electronic lodgment in a number of ways in Table 8. The most common (73%) was to train personnel in remote filing of entry declarations. This was accompanied by adjustments in company procedures for one-third (33%). Organizational changes were also made by some (33%) brokers, while others (13%) set aside some funds or configured their IT systems to accommodate the new steps and obtained internet connectivity. A small proportion (10%) did not have to make any adjustments.

Table 8: Adjustments to electronic lodgment

Number of	Organi-	Training	Proce-	Budget	Equip-	System	None
employees	zation &		dures		ment	configuration &	
	staffing					connectivity	
0	2	4	3				2
1 to 9	7	29	12	3		3	3
10 to 19	2	5	2	2	2	3	
20 to 70	2	6	2	2	1	1	1
250	1	1	1	1	1	1	
TOTAL	14	45	20	8	4	8	6
N=61							

An overwhelming majority (79%) of brokers have connectivity problems (Table 9). This may be a result of poor service provision or poor infrastructure, hence are not within the control of the broker. A third (31%) find adjusting difficult because IT investments are costly. Procedural or organizational changes or costly skills upgrades affect only a small proportion.

Other difficulties expressed by respondents are: (a) explaining the new measures to conventional clients; (b) lack of regular clients; (c) frequency of technical/systems breakdown; (d) additional costs that are difficult to pass on to clients; (e) lack of preparation by the government and less than full implementation of the measure that results in the need for personal follow-up after electronic lodgment. This last concern implies that face-to-face interaction has not diminished, giving rise to opportunities for corruption.

Table 9: Difficulties in adjusting to electronic lodgment

Number of	Costly	Huge	Costly	Huge	Connectivity	None
employees	investment	adjustment	training	adjustment	problems	
		in office	of staff	in		
		procedures		organization		
0	4				6	
1 to 9	11	2	3	1	34	6
10 to 19		1	1		4	2
20 to 70	4	2	2		4	1
250						1
TOTAL	19	5	6	1	48	10
n=61						

According to a VASP, previous requirements did not affect traders directly but now that the CPRS and e-payment of duties and taxes are being implemented, several of its clients express their reservations because direct involvement is required. This confirms that brokers served as the buffer between BOC and importers when it came to adjusting to procedural and system changes, and absorbed all adjustment costs. Since the majority are self-employed small entrepreneurs, the effect of electronic lodgment on them is a fair representation of the impact of IT-based trade facilitation measures on SMEs.

An interview with a CCBI staffer who oversees electronic submissions by members at CCBI premises reveals that about 30 percent use the CCBI computer because they do not have their own; most of them also use the PUC computer or internet cafes as alternatives since there is only one computer at the CCBI office that is connected to the internet. Usually it is the older brokers or those who have their own brokerage companies that have the capacity to invest in their own computer with connectivity. Brokers who lodge on a daily basis have multinational or large companies for clients, e.g., petroleum, food conglomerates. CCBI members adjusted gradually to electronic lodgment, by studying the procedures themselves or assigning their representatives to study BOC requirements because there is no option but to learn the entry declaration procedures. They make use of training provided by their VASP or they study the Customs Memorandum Order or manual of procedures issued by BOC. At the start, difficulties with the use of electronic lodgment created anxiety among the older brokers who were overwhelmed by the use of IT, but this was overcome as they learned to use the computer. VASPs provided training and seminars and even personal tutorials upon brokers' requests. CCBI did the same to help its members adjust despite having to deal with difficult ones. BOC partnered with CCBI in explaining the new procedures and reassuring members that it would be advantageous to everyone.

The ease and low cost of web-based lodgment also benefits SGL importers. Designed for the top 17 percent of 6,000 importers that contribute 50 percent to revenue, huge EDI and unit entry lodgment costs discouraged potential SGL users and offset its clearance time benefits. The MSI study (2006) found that only 90 importers were SGL-accredited as of 2006, or a mere 10 percent of the targeted 1,000. Seventy-four percent of accredited SGL importer/ brokers used the facility and experienced markedly improved clearance time. However the benefits were confined to a small number owing to the high cost of EDI capability relative to the insignificant clearance time advantage. Thus, while speedy "ship to truck" release was afforded by the SGL, this facility was limited to a small number who qualified or who opted to bear the costs. Now that EDI has been replaced by web-based filing, more clients can take advantage of SGL.

Activities undertaken by operator/provider/regulator of the IT services to reduce these difficulties and their effectiveness

Table 10 shows how the VASP, CCBI, and BOC have assisted clients in adjusting to electronic lodgment more smoothly especially with initial difficulties. In general, most brokers obtained assistance from VASPs, and mainly in encoding, e.g. explanation of data fields and how to fill them up, one-on-one guidance, helpdesk. This was followed by training and orientation assistance, then free use of computers at VASP premises. VASPs also sponsored seminars and gave one-on-one tutorials upon brokers' requests. Under CCBI, computer use and encoding help were almost the same in importance. CCBI also provided training, as well as disseminated information through reminders, but it acted mainly as go-between for BOC and the public. Support in these terms was given by BOC in only a few instances, but brokers acknowledge their help in troubleshooting systems problems. BOC partnered with CCBI in explaining the new procedures and reassuring them of the net advantages. One broker who is a CCBI officer noted that personal interaction with BOC is useful in keeping open the lines of communication and dialogue.

Table 10: Measures to reduce adjustment difficulties

	Encoding assistance	Free use of computer at premises	Staff training
VASP	45	28	34
CCBI	39	41	30
BOC	10	6	4

Respondents generally found VASP support effective, with 25% explicitly saying so, and one broker rating his VASP a "9" on a scale of 1 to 10. Effectiveness was in terms of (a) increase in the number of personnel who are knowledgeable in electronic lodgment; (b) reduced lodgment time; (c) assurance that information in the entry is precise; (d) flexibility in lodging at VASP premises in case the client lacks funds to pay for the import processing fee; (e) accommodation of online queries; (f) step by step coaching on electronic lodgment; (g) troubleshooting assistance by telephone over system and connectivity problems. Two brokers (3%) said that the VASP assistance had no effect and they had to wait long before getting assistance.

Impact of IT-based trade facilitation measures on SME participation in trade

Table 11 summarizes the impact of electronic lodgment on respondents' Customs transactions. The majority (65%) experienced a drop in lodgment time to one hour or less. Compared to the pre-electronic lodgment period where lodgment took ½ to one day, this is an improvement although some respondents commented that lodgment is "sometimes fast and at other times slow". The effect on clearance time varied widely, with roughly equal numbers of brokers waiting for less than one hour to 1 to 2 days to clear their goods. One respondent's succinct observation is that clearance time was "the same, and (electronic lodgment) did not really expedite BOC procedures but just saved time", i.e. lodgment was easier and faster but overall clearance time was still unchanged. Another broker with a large employment and client base emphasized that the impact of electronic lodgment was slight at best, since clearance time of 1 to 2 days did not change. In addition, informal facilitation fees that they reported to vary from P800 to P1500 per entry, also remained unchanged.

About 90 percent of respondents find that electronic lodgment has facilitated trade for them. They perceive the benefits to be as follows:

- remote lodgment is possible, or at own VASP or wherever there is internet access
- ability to lodge 24/7 and save the entry anytime
- fast and easy lodgment; convenience; efficient, systematic, quick processing
- no need to queue for ACOS
- ease of obtaining entry number as long as there is no problem at lodgment or in the schedule
- reliable information on the declaration, less paper routine
- less manpower used
- national pride in having electronic lodgment

Of particular interest is that e-lodgment allows the broker to know the outcome of the selection process much earlier, enabling him to take measures to ensure that the entry is processed and cargo is released with fewer hitches. ¹⁷

Despite the clear drop in lodgment time for about 60% of respondents, the impact on the volume of entries was mixed, although the global downturn in economic activity undoubtedly affected trade adversely. Fourteen respondents said that their lodgments increased (16 did not respond to this question). Twenty-nine suffered a drop in the number of entries filed, 17 of which saw a halving of their previous volume of declarations. Eight respondents did not experience any change in import volumes.

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¹⁷ For instance, a respondent commented that "instead of fast encoding, you are aware at once of the selectivity of your entry so you can prepare in advance what measures to undertake in processing and releasing your cargo (*sic*)".

Table 11: Impact of electronic lodgment

	Lodgment	Clearance	Facilitation fees	Number of entries
	Time	time		
Less than 1 hour	15	2	Few responses:	Increase (14)
1 hour	13	1	Increase (0)	Decrease (29)
1 hour 30 min	6	3	Drop by 50% (1)	No change (8)
2 hours	2	1	No change (2)	No response (16)
2 hours 30 min	2			
3 hours	2	1		
3 hours 30 min	1			
4 hours	1	1		
8 hours	1	1		
1-2 days		2		

A number of CCBI brokers confirm the ease of lodgment in terms of facility and speed aside from the ability to view immediately the results of their lodgment, all of which saves them time. However monetary costs have not changed since several "barriers" still exist to block cargo clearance at various steps in the process. Other cases of delays are due to their documents not being in order, or the need to undergo x-ray inspection. Web-based lodgment has meant reduced time spent in the submission of the import entry.

Web-based lodgment through VASPs is a continuation of modernization efforts at the Bureau of Customs, and is an improvement over a previous mode of electronic submission. The impact of procedural changes brought about by such IT applications may be better appreciated in the context of system reforms instituted simultaneously such as transaction valuation, selectivity and risk management, post-entry audit, or the Super Green Lane facility. A number of assessments that were undertaken on the effects of these reforms examined clearance time, a proxy for transactions costs, as the indicator of impact.

Abrenica and Tecson (2003) concluded that the shift in 1996 from manual to automated processing of import documents changed BOC operations significantly, particularly in the matter of trade facilitation such as simplified and harmonized procedures (10 copies, 90 steps, 40 signatures) and shortened release time (10 days to less than 3 hours) that eliminated traditional opportunities for fraud and rationalized the use of manpower and other resources. However some of these gains are perceived to have been lost through time. Where modern Customs administrations are expected to reduce clearance time primarily by intervening only by exception, the reverse characterized BOC instead, i.e. intervention became the rule rather than the exception. By 2002, 71 percent of entries were selected yellow and red, compared to 26 percent in 1996 when ACOS was first deployed. Clearance time was 29.9 hours in 2003 on the average, compared to 21.6 hours in 2000.

The impact on clearance times from the JICA-UPECON (2003) study of 16,770 entries is juxtaposed with theoretical clearance times below. Actual mean time from lodgment to release was 28.5 hours, more than four times the benchmarked time for the quickest red lane (physical inspection) entry. Actual processing time for yellow lane (documentary inspection) entries was almost 35 hours, compared to the longest theoretical benchmark time of 26 hours. Curiously green lane entries took 36 hours to clear compared to 29.5 hours for red lane entries.

Table 12: Customs clearance times in 2003 (hh:mm)

	Green	Yellow	Red
Lodgment to Assessment			
Theoretical	00:07 to 00:33	01:07 to 24:33	04:07 to 72:33
Actual		31:06	24:40
Assessment to Clearance			
Theoretical	00:51 to 01:45	00:55 to 01:50	00:55 to 01:50
Actual	36:16	3:41	4:49
Lodgment to Clearance			
Theoretical	00:58 to 02:13	02:04 to 26:13	06:04 to 74:13
Actual	36:16	34:47	29:29

Source: Abrenica and Tecson (2003) who obtained theoretical times from BOC and actual times from JICA-UPECON (2003).

In a 2004 study (Clarete 2004) calculated significant time savings of 1 to 5 days from the arrival of goods at the port to their release, after the shift in valuation system from home consumption value to transaction value. Such time savings occurred in the interval between arrival and lodgment because the pre-shipment inspection document that used to be required for lodgment was no longer needed. However total cargo processing time was still 5.4 days.

Overall findings of a 2006 study were mixed on the efficiency, effectiveness, and anticorruption impacts of the shift to transaction valuation, Super Green Lane, and post-entry audit (MSI 2006). 47 percent of importer/broker survey respondents experienced faster release of their shipments under the new valuation system and 67 percent of SGL-accredited traders attributed faster clearance to the SGL. However several studies demonstrated no appreciable improvements during the lodgment-to-clearance interval subsequent to reforms. Only the SGL showed slightly faster release times. Risk selection increased from 26 percent in 1997 to 44 percent in 2000, 71 percent in 2002 and 90 percent in 2004, causing efficiency to drop.

"The IT reforms conducted between 1992 and 1998 appear to have produced a major reduction in cargo clearance times, reducing the bulk of paperwork and signatures that fostered opportunities for corruption. These efficiencies occurred primarily in the early stages of cargo processing, when goods arrive at port through lodgment. These early steps appear to be more amenable to automation and streamlining reforms. However, none of the later stage EGTA-assisted reforms seem to have had additional effects in reducing clearance times; in fact, just the opposite is indicated. This appears to have resulted from counter-reform actions that have increased the selection of shipments for documentary and physical checks – offering opportunities for corrupt transactions. While importers generally perceive that clearance is now faster, they believe that customs procedures are still plagued by corruption, insider dealing, and lack of openness." (MSI 2006, p.18)

More recent evaluations of Customs procedures undertaken by worldwide surveyors show basically the same unfavorable picture. Philippine respondents to the 2008-2009 Global Competitiveness Report (World Economic Forum 2008) gave a rating of 2.9 to Customs procedures (defined as formalities regulating the entry and exit of merchandise), on a scale of 1 for extremely slow and cumbersome to 7 for rapid and efficient. In terms of burden of Customs procedures, the country ranked 105 out of 134 with a mean score of 3.9, compared to top-ranked Singapore score of 6.5. This means the indicator constitutes a disadvantage. The country's overall

global competitiveness rank is 71 with a score of 4.09, somewhat midway between the top-ranked score of 5.74, and the lowest-ranked score of 2.85. Similarly, the 2008 World Competitiveness Yearbook (IMD 2008) placed the Philippines in the 40th rank out of 55 countries. On the question whether Customs facilitates the efficient transit of goods, the country's 51st rank placed it almost at the bottom. Previous years' business sector perception of corruption scores were 2.57 in 1999, 2.7 in 2000, 3.5 in 2001, 2.6 in 2002, 3.0 in 2003, 2.7 in 2004.

The observation that substantial improvements took place in the interval between arrival of shipment to entry lodgment whereas none did from entry lodgment to cargo release, is substantiated by the results of our broker survey. A cursory examination of cargo processing would seem to suggest this as inevitable, as the majority of the steps between lodgment and clearance seem to have been automated for some years already and do not seem likely to yield any further efficiencies. However a closer look reveals some manual steps that apparently take time, i.e. (step vii) where the EPU segregates the import documents, (step viii) where paper documents are received at the FED commodity section, (step ix) where an officer is assigned to review the entry, (step x) where the officer reviews the entry and makes a report, (step xi) where the entry is amended, (step xii) where the documents are carried by messenger to the collection division. Thus while web-based electronic lodgment is a major improvement from manual to IT-based procedure in recent years and has reduced lodgment time and costs, speedy clearance is still constrained by manually-performed tasks particularly in assessment.

Other factors not in the control of BOC have been known to cause delays, and must also be dealt with. For instance, late arrival of original documents required for lodgment; late submission by shipping lines of the inbound manifest that is used to validate entry declarations and must be done before entry lodgment; preference for afternoon lodgement at airports leading to release in the evening, attributed to the truck ban from 6am-9am and 6pm-9pm and use of "backdoor release" facilities, were among the reasons for the long wait between the discharge of cargo from the vessel to lodgment (reckoned upon ACOS acceptance of the declaration) in the 2003 study. This pre-lodgment requisites took from 1.5 to 2.9 days and occupied the longest segment in total processing time at any port, accounting for about two-fifths of the total time between the arrival of the vessel and the release of cargo to the consignee (JICA-UPECON 2003).

V. Conclusions and Recommendations

The survey revealed that web-based electronic submission shortened lodgment time but did not affect total clearance time: the majority experienced a drop in lodgment time to one hour or less, an improvement over the pre-electronic submission time of ½ to one day, but clearance time of 1 to 2 days remained unchanged. Manually performed tasks within the lodgment-to-clearance interval may be slowing down overall procedures. Nevertheless, there are IT solutions to these steps as well, making it possible to shorten the interval. Test implementation in early 2009 of the E2M System took 15 to 52 minutes to complete at a particular port 18, reckoned from the submission of the manifest by the shipping line to the release of the shipment. This can become the initial benchmark for cargo processing, if not for the lodgment-to-clearance interval, considering that BOC has a self imposed target of 30 minutes. Other causes of delay prior to lodgment must also be addressed.

¹⁸ As reported by Dir. Josephine Nagallo during her presentation at the Regional Policy Forum on Trade Facilitation in Times of Crisis on 20 May 2009 in Beijing, China.

Electronic lodgment allows clients to use any computer with internet connectivity, hence this particular measure is more easily accessible to a greater number. The only prerequisite is to be CPRS-registered and have a Customs Client Number, indicating that one is enabled to transact electronically with the BOC, a requirement that is also relatively easy to comply with. Indeed one-third of the survey respondents filed entries through their own units exclusively while two-thirds used both their own and other computers.

In contrast, prior to web-based submission, traders/brokers had to either go to the EEC for lodgment or be EDI- or DTI-enabled. Although theoretically open to any client, in practice the costs of subscribing to software and investing and maintaining hardware and connectivity for EDI and DTI deterred clients with few resources from accessing and using such IT procedures. Similarly, the EDI-capable requirement for SGL users limited its accessibility, by effectively disabling resource-constrained firms from pursuing accreditation with the facility. The benefits were thus limited to a small number of clients and the full impact of such a trade facilitation program, as it was called, could not be realized. SGL requirements also precluded SMEs from participating, putting them at a further disadvantage. Electronic lodgment now makes it easier and cheaper for all importers/brokers, regardless of size, to submit entries. Considering that small importers (those who make 1 to 2 shipments a year) are estimated to account for over half of the 800000 import entries lodged annually (Donald Dee, quoted in Gulane 2007), the number of importers and entries affected by electronic lodgment is substantial.

The trading volume of firms regardless of size is determined by the demand for their products and their capacity to supply these. At the time of the study, the global economic downturn was the single overriding reason for depressed trade all around. The trading capacity of SMEs is thus currently a result of poor demand rather than access, technology, other size-related, or procedural difficulties. This makes it difficult to establish the extent to which IT-based cargo processing improvements increased SMEs participation in trade, whether in terms of greater trading volumes of particular SMEs or a larger number of SMEs brought to trade. Nevertheless 20 percent experienced an increase in filed entries while the number did not change for 12 percent.

Considering that micro/cottage and SMEs account for 25 percent of the country's total exports revenue, and roughly 70 percent of exporters are SMEs, export growth is likely to be partly attributable to SMEs. The contribution of exports to GNP rose from 10.9 percent in 1970, 19.4 percent in 1980, 27.1 percent in 1997 to 39.09 percent in 2007. Despite the current economic slowdown, export industry grew by an average 4.4 percent in late 2008. Non-electronic goods such as wearables, food, home furnishings, marine, mineral and petroleum products, metal components and coconut products gained strength, while automotive parts, agricultural products, and minerals showed good potential. SMEs engaged in agricultural and forest based products exports made headway, with the majority exporting fashion accessories, gifts and houseware, holiday décor and food products (Berida 2008). Hence the strong likelihood that growing exports of food, home furnishings, and agricultural products at least, originated from SMEs.

Convenience and speed of electronic submission aside from the ability to view immediately the results of lodgment reduces transactions costs. About 90 percent in the survey (most of whom are SMEs) confirmed that web-based lodgment made transacting more efficient, lowered time and resource expenditures, or ensured reliable information. Since compliance costs for SMEs are disproportionate to their size, IT-based lodgment benefits them by lowering unit operational costs and total cost burdens enough to make them more competitive with their large counterparts: manpower required to undertake import procedures is lessened, cost of money is reduced by the shorter wait, uncertainty is eliminated with online information on the status of entries and BOC

announcements. Considering their substantial share in export revenue and outstanding performance in the face of global recession, lowered transactions costs and more efficient trading implies that SMEs' contribution to exports would be enhanced.

Components of IT-based measures along the transaction chain that facilitate SME participation in trade and interventions required to ensure this

Survey results point to a number of bottlenecks or deficiencies encountered by respondents in complying with import requirements: (a) Connectivity problems, cited by an overwhelming majority, are a huge problem. Reliability and speed/bandwidth of internet connection provided by telecommunication firms and internet service providers, affects the ability to encode or download electronic document information. Competition among private providers ensures better service, but poor telecommunications infrastructure is the binding constraint. (b) Frequency technical/systems breakdown on BOC's side must be addressed by ongoing improvements such as the E2M Project. (c) Inadequate implementation of electronic lodgment that results in a continuous need for personal follow up, is observed by respondents to be due to the lack of preparation by the government. Glitches in the system, a likely outcome of infrastructure and connectivity problems, disable clients from lodging their entries properly and require them to seek information or intervention from BOC personnel. (d) Costly IT investments as cited by one-third of respondents, are more likely to affect brokers with little capital and few clients. Web-based electronic lodgment allows them to use any computer, however, eliminating the need to invest in software or hardware for purposes of complying with import procedures. Aside from the VASP, CCBI, and PUC computers, internet cafes proliferate in the port area that provide the required services.

Interventions were suggested by survey respondents to make electronic lodgment more effective. IT system improvements would seem to have the greatest impact, such as: (1) Adjusting the system to accommodate the large number of entries lodged during office hours or making the system available 24/7. While preparation of entries and lodgment with VASPs can be done 24 hours a day 7 days a week, BOC servers are in operation only from 8am to 6pm (except NAIA which operates up to 10pm). Furthermore, the Payment Application Secure System, under which duties and taxes payable are transmitted to the authorized agent bank via a payment gateway through a secure communication channel and collected by debit from designated bank accounts, is available only during banking hours or 9am to 3pm. To access the system and take advantage of processing and bank hours, entries are lodged during this time interval, contributing to heavy traffic that slows down the system. (2) Additional computers, units for clients' free use at BOC are needed. (3) User-friendly software is preferred. (4) IT infrastructure to support this system at all ports. E-lodgment under ACOS is currently available at 11 out of 17 ports accounting for 92 percent of import value. These are the Port of Manila (POM), Manila International Container Port (MICP), Ninoy Aquino International Airport (NAIA), Cebu, Davao, Clark, Subic, Batangas, Limay, Mariveles, and Cagayan de Oro. E2M-IAS was implemented in the 3 ports of Batangas, Limay, and Mariveles, which account for 23 percent of import value. The E2M-IAS has not yet been tested to handle a large volume of entries, e.g. at Batangas port where it was pilot tested, there are less than 200 entries per month in contrast to MICP which takes in 1000 entries daily. (5) Ensuring fast and easy access to the system and immediate response, and providing back-up for the system.

Information/education is another area respondents find important: (1) Give proper information to brokers. (2) Immediately publish clear guidelines in line with fast changing customs clearance process. (3) Train staff for free. Provide innovative training. (4) Hold seminars for

stakeholders, e.g., on adapting to e-lodgment and related procedures. Moreover, a few procedural interventions may enhance the positive effect of electronic filing: (1) Apply less stringent measures for errors in lodgment. Flexibility on this point would be reasonable at the early stages of its implementation, but standards must be imposed once clients have gotten used to the system. (2) Strictly implement self-lodgment by brokers to eliminate the practice of using unofficial assistants or outside encoders. This upholds professionalism and accountability in the workplace.

The study further recommends the following IT-based interventions along the transaction chain to facilitate SME participation in trade:

- Complete the computerization improvement program and implement the new procedures in all ports
- Address the reasons for delays during the lodgment-to-clearance interval, such as (a) selectivity criteria that are outdated or unrealistic, (b) HS nomenclature that causes confusion, (c) hardware and software deficiencies at assessment and online release, (d) inadequate facilities for physical inspection.
- Address constraints occurring between the arrival of cargo to lodgment, e.g. delayed submission of manifest and other documents
- Implement fully a National Single Window, defined as a system that enables a single submission of data and information that is synchronously processed, and is a single point of decision for the release of cargo by BOC based on decisions of other agencies communicated to BOC. The initiative has been discussed for sometime already, as ASEAN agreed to adopt this approach at the national and regional level years ago, while an Executive Order to create the Philippine NSW Task Force for Cargo Clearance was created in 2005. Ground work has already been done on the process and technical requirements, with assistance from various multilateral institutions. Difficulties must be confronted by decision-makers, particularly due to the mindset among some stakeholders that control will be given up on what they perceive to be their respective jurisdictions, with the consequent resistance against moving forward.

Finally, statistics on SME trade must be generated for baseline purposes as well as on a regular basis to enable a deeper understanding of their contribution, needs and potentials. Data on establishments collected by the National Statistics Office does not include information on trade while foreign trade statistics do not relate to enterprises engaged in them. The directory of SMEs at the Department of Trade and Industry only indicates import or export activity of those enterprises that provided the information, and does not contain indicators of magnitude or scale.

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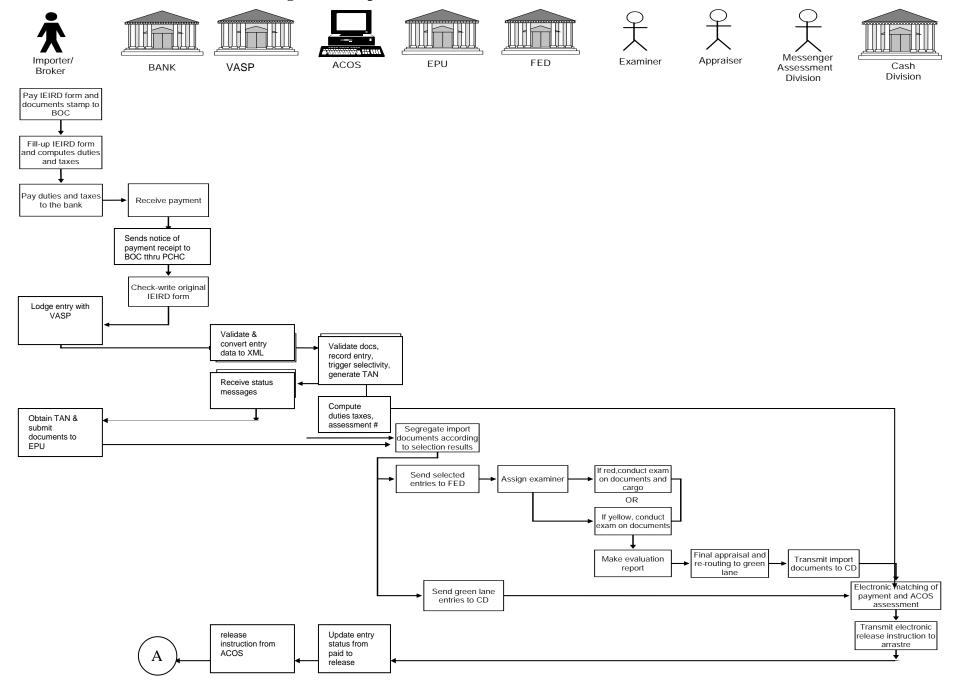
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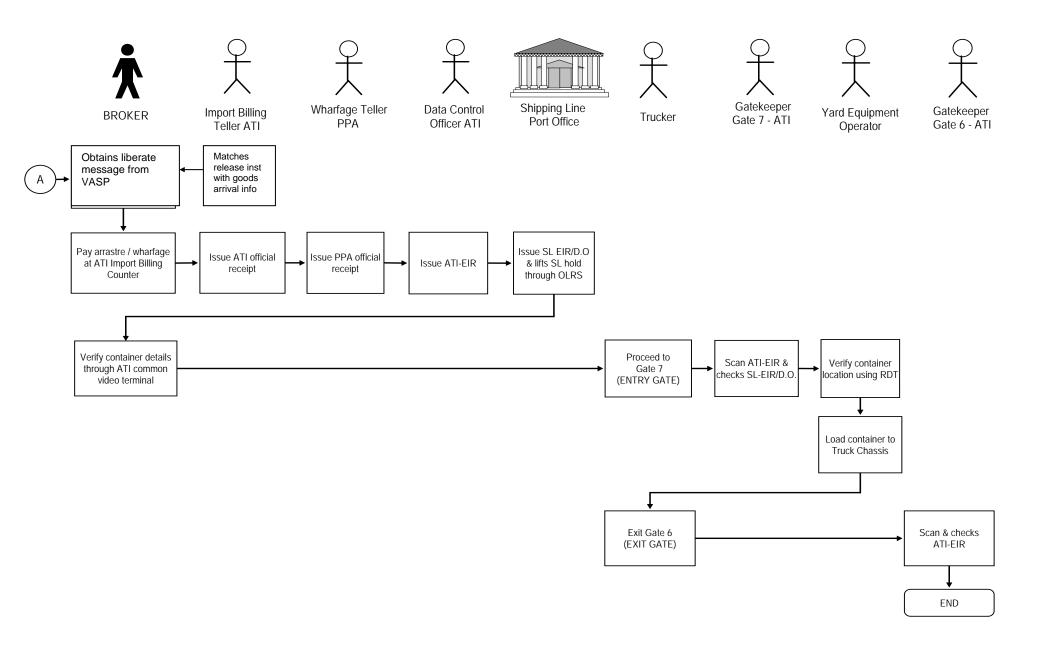
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Annex 1: Flowchart illustrating clearance procedures





Annex 2: Customs memorandum order 19-2007 lodgment of entries through VASP

Effectivity Date: July 10, 2007 Expiry Date: July 10, 2009

I. Objectives

To facilitate the processing of import and export declarations and clearance;

To monitor and control the entry of all types of imported goods, i.e., noncommercial goods, commercial goods, semi-finished goods, regulated goods;

To monitor the cargo's status all throughout the clearance and release process; and,

To promote "paperless" procedure in Customs processing using internationally agreed and adopted standards.

II. Scope

The provisions of this Order shall apply to Phase 1of the implementation of the e-Customs Systems and be applicable to types of import declarations such as Consumption and Warehousing entries in all Collection Districts including sub-ports and other BOC offices nationwide.

III. General Provisions

The BOC shall provide the necessary Gateway infrastructure and telecommunication facilities to enable electronic lodgement of import entries via the internet through the use of VASPs front-end system.

The VASPs shall be responsible for the installation of the necessary computer system on the internet at the importer's offices that will enable to encode and transmit import entries to and receive the corresponding responses from BOC e-Customs System via the BOC-VASP Gateway.

The importer or broker shall file their entry declaration by filling up the Single Administrative Document (SAD) declaration online through a Value Added Service Provider (VASP). The declaration shall be sent to the BOC, in a format accepted by the Bureau, thru the BOC-VASP Gateway.

The role of VASPs in the import entry lodgement and clearance process:

3.4.1 Validates captured entry declaration data from importers and brokers in accordance with the validation rules to be provided by BOC;

Converts data to XML format that is compatible with the requirements of the BOC-VASP Gateway;

Receives error or status messages from the BOC-VASP Gateway;

Notifies clients concerned of the messages received from the BOC-VASP Gateway (i.e., advance duty payment instruction message, final payment instruction message, statement of settlement of duties and taxes message, release instruction message)

Upon submission of SAD from VASP to BOC e-Customs System through the BOC-VASP Gateway, the Selectivity System is automatically triggered;

3.5.1 If declaration is selected, the importer/broker shall submit the hard copy to the Entry Processing Unit (EPU) of the port concerned.

3.5.2 For green lane entries, the IEIRD and its attached documents shall be submitted to BOC the following Tuesday of the following week.

The e-Customs Systems validates and officially records the entry in the ASYCUDA database;

Payment of duties and taxes due on the goods shall follow existing regulations;

The electronic cargo release instruction is sent from ACOS OLRS to the transit facility operator. The release instruction message is generated by the Payment Application System as soon as the declaration is electronically tagged that the duties and taxes have matched the payment through the Authorized Agent Banks (AABs).

IV. Operational Provisions

Lodgement of Import Entry

The importer/representative shall fill up the SAD declaration through the VASP application. VASP shall convert the SAD declaration into an XML file and send it to BOC-VASP Gateway.

The e-Customs System calculates the amount of duties and taxes due.

The e-Customs System checks the validity of manifest, bill of lading, and mode of payment declared by the importer. This process also verifies if the importer and broker are valid BOC clients.

Feedback message is sent to the VASP regarding the success of lodgment or the rejection of the entry. The VASP, in turn, informs the importer about the disposition of the entry.

Standard ASYCUDA Process

The e-Customs System validates the entry against e-Customs rules and automatically rejects it upon failure during verification. Failure to pass the system checks triggers the creation of a validation error list. This list is transmitted to the importer through the VASP.

If the declaration satisfies all system rules, the declaration shall be registered. The system shall assign a registration number to the said declaration.

The Selectivity System is triggered during the assessment process. The declaration can be tagged as follows:

- 4.2.3.1 Green declaration is allowed to move to the next process
- 4.2.3.2 Yellow declaration is subject to document check
- 4.2.3.3 Red declaration is subject to document check and physical examination of goods
- 4.2.3.4 Blue declaration is tagged for post-clearance

The system sends a feedback message to the importer, through the VASP, that the entry has been selected or assessed.

BOC Examiner performs necessary action, if declaration has been selected.

After document inspection or physical examination, the examiner fills up an "inspection act". This edocument contains the findings of the examiner and the accompanying recommendation such as uplift of the duties and taxes.

The system calculates duties and taxes after the physical inspection of the cargo, and the inspection of all necessary documents to copy with the newly assessed declaration.

The system shall assign a system generated assessment number composed of the date of the entry assessment, a Series letter and a unique reference number to the declaration.

The registered declaration writes-off the bill of lading or airwaybill.

Updating of pre-payment accounts and bonds for Warehousing and Transshipment entries are done by the system during assessment.

Payment of Import Entry

Nothing in the existing rules and regulations for payment of duties and taxes shall be changed.

Release of Cargo

After the importer's payment of duties and taxes have been matched with the payment details transmitted by the Philippine Clearing House Inc. (PCHI) to BOC, an automatic release instruction message shall be transmitted to the arrastre and to the VASP via the BOC-VASP Gateway. The VASP of the importer shall inform the importer of the release of his shipment.

V Repealing Clause

All Orders, Memoranda, Circulars or parts thereof, which are inconsistent with this Memorandum, are hereby deemed repealed and/or modified accordingly.

VI Separability Clause

If any part or provision of this Order is later on declared invalid or illegal, the remaining portion shall remain valid and unaffected.

VII Effectivity

This Order shall take effect upon issuance of a memo by the Deputy Commissioner, MISTG indicating the Port and date where this CMO shall be implemented.

(SGD.) NAPOLEON L. MORALES Commissioner

Annex 3: Customs brokerage

Scope of Practice

Broker analysts Domondon and Domondon (2005, p. 40) point out that Republic Act 1937 gave customs brokerage a dual personality of being a profession and business. That is, aside from the licensure examination that made it a profession, corporations were allowed to engage in customs brokerage business as long as at least 2 officers were certified customs brokers (in Sec 3401), and individual licensed customs brokers could establish a "customs brokerage business" in practicing the profession (in Sec 3406). They observed that the phrase "customs brokerage business", which refers to customs clearance and trucking services, may have been used because port operations at that time were under the Bureau of Customs until 1975. The Tariff and Customs Code however did not define the scope of the practice so that the profession was presumed to be purely devoted to transacting with the Bureau of Customs on import and export clearance only.

The Professional Regulations Commission defines the scope of practice of Customs brokers to be as follows: "Customs broker profession involves services consisting of consultation, preparation of customs requisite document for imports and exports, declaration of customs duties and taxes, preparation, signing, filing, lodging and processing of import and export entries; representing importers and exporters before any government agency and private entities in cases related to valuation and classification of imported articles and rendering of other professional services in matters relating to customs and tariff laws its procedures and practices."

Furthermore, customs brokers are considered to be practicing the profession if the nature and character of their employment in private enterprises requires professional knowledge of customs and tariff administration, or if they teach customs and tariff administration subjects in any university, college or school duly recognized by the government.

According to the same analysts (Domondon and Domondon 2005, p. 42), for academic purposes a customs broker is one who is an expert in Customs and tariff laws, their application and procedures, has passed the licensure examination, and holds a certificate of registration. The new law, Republic Act 9280, gives the scope of services as the following:

- a. consultation on matters relating to tariff and customs laws and their implementing rules and regulations, and all other laws and regulations related to the activities of importation and exportation;
- b. preparation of customs-requisite documents for import and export;
- c. declaration of customs duties and taxes;
- d. preparation, signing, filing, lodging, and processing of import and export entries and documents required to be filed by the Bureau of Customs and other government agencies, under the Tariff and Customs Code and other existing laws;
- e. representing importers and exporters before any government agency and private entities in cases related to valuation and classification of imported articles;
- f. rendering of other professional services in matters relating to customs and tariff laws, procedures, and practice.
- g. Teaching customs and tariff administration subjects in any university, college or school duly recognized by the government.

The authors add that some of the above may be performed by non-customs brokers such as lawyers or traders. Moreover, customs brokers may delegate certain activities that do not require professional knowledge of customs and tariff administration to others.

Thus Customs clearance has been redefined as a professional activity solely delegated to individual customs brokers, and trucking or engaging in private or common carrier operations are a separate activity that is purely business in nature (Domondon and Domondon 2005, p. 68). Customs clearance is operationally only up to the payments while securing delivery is not part of the professional services of a customs broker but of cargo handling and transport business entities regulated by the port authority. However brokers are not prohibited from setting up another entity to handle shipments they have cleared.

In order for the Professional Regulation Commission (PRC) to be efficient in dealing with professionals of a given discipline with respect to issues affecting them, it recognizes professional organizations that are established for the benefit of their members and advancement of their discipline, and are representative of the profession. All customs brokers thus have one national organization that is accredited by the PRC and Professional Regulatory Board for Customs Brokers (PRB). The functions of the accredited profession organization are to nominate candidates to the PRB, prepare guidelines for the continuing professional education, maintain a roster of professional customs brokers, and issue the Code of Ethics and Code of Technical Standards. Registered professional customs brokers automatically become members of the accredited professional organization.

The Chamber of Customs Brokers is the national organization of Customs brokers which was duly accredited by PRC on November 13, 1991. The Chamber has more than 3,000 members engaged in brokerage either in their individual capacity, in partnership with other customs brokers, or as principal or alternate customs brokers of brokerage companies. It is affiliated with the International Federation of Customs Brokers Association, the Philippine Chamber of Commerce and Industry, the Philippine Federation of Professional Association, and the Port Users Confederation.

The Chamber has the following objectives: (1) promote better understanding between the Customs Brokerage Industry and the Private Sector; (2) serve as an advocacy group in its consultations with the Bureau of Customs; (3) assist the Bureau Customs in the formulation of policies and operational reforms; and (4) conduct continuing education program. The last is not mandatory but it is to the advantage of the customs broker to pursue this. The PRC has standard guidelines for its implementation for all professions while the PRB and accredited professional organization have guidelines for this. Units may be earned through attendance at seminars, higher education, self-directed learning package, authorship or editorship, postgraduate/in-service training, study tour, and professional chair.

Implications for Customs Brokerage²⁰

As described in the text the development of the trade mediating profession of brokerage services evolved in tandem with the complex array of trade rules and restrictions of the country in

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¹⁹ Other associations are the Professional Customs Brokers Association of the Philippines Inc., National Customs Brokerage Association of the Philippines, and the Visayas-Mindanao Customs Brokers Association.

²⁰ This section was contributed by F. Alburo.

the post-war period. All traders, large and small, were exposed to this complicated trading environment, although SMEs were at a disadvantage because of difficulties on their production side and in their capacities to meet international trading requirements and procedures. It was also shown that, rather than simplifying trading rules and procedures, the government formalized brokerage as the mechanism for assisting traders satisfy processes and procedures.

The combination of government and private sector responses to the need for facilitating the movement of goods during the period of limited trade liberalization led to the existing structural conditions on which IT was applied. First, with more traders using intermediary brokerage services (e.g. more than 90 percent of importers) it was only a matter of time after the initial supervision of the services by the BOC that it would become a profession requiring a licensure examination administered by a national licensing board instead of the BOC. The 1957 law specified the professionalization of brokerage services.

Second, the nature of brokerage services and the provisions of the law spawned a segment of the Philippine educational system that catered to these requirements by offering academic degrees specific to the brokerage profession. Given the dominance of the private sector in tertiary education this led not only to schools granting degrees in customs administration but also their ancillary activities (e.g. books and reference materials development and production, review classes for licensure examination). While the brokerage licensure examination initially did not strictly require a specific degree but minimum related subjects, this engendered a sub-industry in the educational sector.

Finally, the recent customs broker law which further professionalizes the services and adds more regulations made the adjustment to the initiation of IT into trade procedures and processes more difficult. As noted above, some of these include the specific academic degree requirement for licensure, the required signature of brokers in import documents but prohibition of signatures of those brokers employed by companies, the explicit requirement that customs clearance can only be delegated to licensed customs brokers, and the prohibition of corporate direct or indirect practice of the profession since the professional license is only given to natural persons and not to corporations. While the new law is undergoing revision and possible modifications, the structural conditions remain.

These conditions along with their legal framework constrain the ability of traders to directly file their entry declarations at customs as the portal for the clearance and release of their cargoes. The encouragement of self-assessment in the IT system is meant for the brokers rather than the traders as the language of the law implies the representation of traders by brokers.²¹

Although automation of customs procedures has had a relatively long history, it is in the web-based application that these have been more neutral and equally accessible to all types of traders, large or small. The survey of brokers also revealed that these are mostly SMEs themselves and have equally used the IT applications to process declarations of their clients.

The SMEs among the brokers have been adjusting fairly quickly to the web-based IT system in the Philippine customs. Internal adjustments in the form of organizational changes, staff training, office procedures, and fine tuning budgets are more prevalent among the SME brokers in part

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²¹ The use of brokers is not mandatory, but under the new law any other agent or attorney-in-fact is not allowed to sign import documents. Since this is being objected to, the provision of the old law authorizing the importer as the holder of the bill of lading or airway bill or broker/agent/attorney-in-fact, to make the import entry, is still being enforced.

because their number of workers is small and need to be more flexible and multi-tasking. The larger brokers, on the other hand, have presumably more specialized staff with adequate training in IT.

The biggest challenge to the institution of IT in trade facilitation in the Philippines is in how the policy environment can be reformed. If the NGTF measure that phases out brokerage services in trade becomes part of an eventual multilateral agreement, several implications surface. For one, the country's national law on brokerage will have to be aligned with the international agreement. This will take political initiative in the face of larger related structural conditions. Indeed, even with IT applications there may be modifications needed to the existing laws regarding broker services. For example, the required signatures of brokers in all documents will have to take into account the acceptability of digital signatures in aligning with the e-commerce law of the country.

For another, a phase out of brokerage services will have repercussions on sub-sectors of the education industry. Resources currently tied up in granting educational degrees in customs administration may have to be reconfigured. A review and restructuring of the sub-sector would take time although the other measures related to TF would also have implications on the capacity requirements in the form of education and training of people who would perform post-clearance audit, archiving of trade documents, appeals processes in trade disputes, and customs valuation, among others.

Finally, the brokerage profession will likely become a casualty of any reform process that allows direct filing of declarations. Naturally there will be initial resistance to the threat of a phase out of brokerage services although the extent of this may depend on the age-cycle of the profession. With an average of 12 years in the business it is expected that re-tooling will not be acceptable immediately. Wider appreciation of the various implications of TF will be necessary in order to introduce alternative possibilities to brokerage services.

Annex 4: Survey instrument

About the Study:

This is a regional study commissioned by the Asia-Pacific Research and Training Network on Trade (ARTNeT) – UNESCAP. The lead research institution is the Centre for the Advancement of Trade Integration and Facilitation (CATIF), an organization that aims to contribute to the understanding of, and policy formulation on trade-related issues.

The focus of this study is the electronic lodgment of entries. In view of the crucial role of brokers and agents in traders' transactions with the Bureau of Customs, the study will benefit greatly from your experiences with the IT-based cargo clearance system at BOC. The assistance of the Chamber of Customs Brokers Inc in this survey is therefore highly appreciated.

Please be assured that company names will be kept confidential.

QUESTIONS

Α.	PROFILE
Comp	any Name
Addre	SS
Main 1	Business Activity
	er of Years in Brokerage
Numb	er of Employees
Numb	er of Clients
В.	METHOD OF CARGO DECLARATION
1. Do	you lodge declarations daily? □Yes □ No If yes, how many?
If n	o, how many declarations do you usually lodge per week?per month?
2. Hov	w is this filed? (please check and provide service fees per lodgment) Manually
	☐ Electronically using own office computer
	Service fee (PHP): INSE-KonekCDEC
	☐ Electronically using CCBI computer Service fee (PHP)
	☐ Electronically using PUC computer Service fee (PHP)
	☐ Electronically at internet café Service fee (PHP)
	☐ Electronically using encoding service provider Service fee (PHP)
С.	ADAPTING TO ELECTRONIC/INTERNET LODGMENT
	our company has its own IT system for import/export transactions, does this include: computer with internet connectivity
	Software that computes taxes due
	system that allows clients to send purchase orders electronically
	Others (please describe)

2. Did you have to make any new investments in IT (such as computer equipment, software and internet connectivity) as a result of the electronic lodgment of entries? Yes No If yes, how much was your investment in IT for this purpose?
3. How did you adapt to electronic lodgment and what adjustments, if any, did you make in your: (please describe) organization and staffing training procedures budget equipment system configuration and connectivity other adjustments
D. EXPERIENCE WITH ELECTRONIC/INTERNET LODGMENT
 1. What difficulties are you encountering in adapting to electronic lodgment? costly investment in equipment, software and connectivity huge adjustment in office procedures costly training of staff huge adjustment in organization connectivity problems others (please describe)
2. What measures did the VASP implement to reduce these difficulties? provided encoding assistance provided free use of computer at VASP premises trained our staff others (please describe) How effective were these measures?
3. What kind of support did you get from the chamber in adjusting to internet lodgment? provided encoding assistance provided free use of computer at CCBI premises trained our staff others (please describe)
4. What kind of support did you get from the Bureau of Customs? provided encoding assistance provided free use of computer at BOC premises trained our staff others (please describe)

5. What needs to be done to support firms adjus	t to electroni	c lodgment?	
6. What changes resulted from the shift to electr	ronic lodgme	nt? Please specify:	
shorter average lodgement time by	hours	minutes	
longer average lodgement time by	hours	minutes	
shorter average clearance time by	hours	minutes	
longer average clearance time by	hours	minutes	
drop in average facilitation fees by	%	PHP	
increase in average facilitation fees by _	%	PHP	
7. What are the other benefits of electronic lodg	ment?		
☐ It facilitated trade			
☐ It did not facilitate trade			
8. Did your clients decrease or increase in numb Decreased by(please specify numb Increased by(please specify numb	er)	etronic lodgment?	

THANK YOU FOR YOUR COOPERATION. PLEASE BE ASSURED THAT COMPANY IDENTITIES WILL BE KEPT CONFIDENTIAL