Singapore's approach to streamlining trade documentation

Over the years, Singapore Customs has developed sophisticated IT platforms to enable the exchange of Government-to-Government, Business-to-Business and Business-to-Government information in order to facilitate the flow of goods. This article gives an historical overview of the important steps it has taken in building its national trade infrastructure, and introduces the main services offered that benefit the government and the private sector of Singapore.

The idea for Singapore’s National Single Window (NSW) was borne from discussions in the 1980s on continued economic growth. Through extensive meetings and discussions with government agencies, companies, organizations and industry associations, all parties agreed that significant savings would result from reducing the burden of trade documentation handling.

In December 1986, the TradeNet® project was announced with a target to bring the system online within two years. Building TradeNet® was a technical challenge. To have it go live on time, the TradeNet® team focused on simplifying information required for the exchange and transaction processing components of the system. Other capabilities to handle more complex processes were planned to be implemented in a phased approach.

Singapore launched TradeNet®, the world’s first NSW, on 1 January 1989. By December 1989, TradeNet® was handling about 45% of all trade documentation for sea and air shipments. The success of the project led to the government mandating the use of TradeNet® for all trade transactions in 1991, two years ahead of schedule.

TradeNet® is available 24 hours a day, 7 days a week. Permit application approvals are conveyed electronically to the sender through TradeNet® within 10 minutes in 99% of the cases. The cost and turnaround time for the preparation, submission, and processing of trade and shipping documents have been significantly reduced. By adopting a risk management approach using information declared by traders in TradeNet®, cargo which is assessed to be of low risk is cleared quickly and seamlessly without unnecessary delays at the border.

TradeNet® has undergone regular updates and enhancements to streamline trade documentation procedures, align to new international standards, and promote consistency and uniformity in product classification. In the last version upgrade in 2012, changes were made to align TradeNet® with the latest WCO Data Model and to incorporate the revised Association of Southeast Asian Nations’ (ASEAN) Harmonized Tariff Nomenclature (AHTN), with an approximate 15% increase in the number of tariff lines to take into account WCO and ASEAN amendments. Amendment and cancellation rules for payment permits involving non-dutiable goods were also streamlined to help ease traders’ cash flow burden.

TradeNet® caters for Business-to-Government (B2G) and Government-to-Government (G2G) connectivity. A key business innovation related to Singapore’s NSW journey is the introduction of TradeXchange®, to serve as a neutral and trusted integrated IT platform that enables the exchange of both Business-to-Business (B2B) and B2G information, and seamless inter-connectivity among commercial and regulatory systems for the Singapore trade and logistics community, to facilitate the flow of goods.

Launched in 2007, TradeXchange® is a multi-agency initiative led by Singapore Customs, the Economic Development Board, the Infocomm Development Authority, and Spring Singapore (an agency that helps enterprises grow and builds trust in Singapore products and services). The Singapore Government appointed a private sector company as an independent contractor to
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Develop, operate, and maintain, as well as drive the adoption of this project. The company works with other content and service providers to offer other value-added service on TradeXchange®.

TradeXchange® provides a single data exchange platform for the trading community to integrate their trade processes, allowing them to pass on documents and information in industry-accepted standardized formats. It was envisaged that such a common platform will provide greater efficiency and clearer visibility to businesses across the supply chain.

Value Added Service (VAS) providers [3rd party Infocomm Solution Providers who leverage the services, information, and connectivity in TradeXchange®, to develop and market solutions and services to the trade and logistics community] and TradeNet® Frontend Providers [Vendors who have been certified by Customs to provide TradeNet® Frontend solutions – companies who want to be a TradeNet® Declaring Agent may purchase the solutions from any of these vendors] can also leverage the network connectivity and information deposited into TradeXchange®, to develop and market new and/or enhanced innovative solutions for the trade and logistics community. This will stimulate the growth of the information-communication industry, and enhance the capabilities and sophistication of the trade and logistics sector.

TradeXchange® also serves as a ‘one-stop’ connection hub [Instead of building and maintaining multiple connections to multiple parties, VAS providers and service providers just need to build and maintain a single connection to multiple parties through TradeXchange®] to VAS providers, TradeNet® Frontend Providers, and logistics service providers, enabling them to expand their service offerings, and provide a more efficient end-to-end solution to their customers. Businesses benefit by enjoying clearer supply chain visibility, faster shipment turnaround and productivity due to the reduction in errors, and timely exchange of information.

To ensure successful implementation of the approach, ‘TradeXchange’ facilitates and catalyses the integration of the various parties based on prevailing international/industry data standards, and made available the interface specifications to allow other players on similar value chains to also ‘plug-in’ to TradeXchange®.

Today, more than 200 companies, including manufacturers, logistics providers, airlines, insurance companies, and banks have benefitted from TradeXchange®. Companies use TradeXchange® in areas such as trade permit preparation, applications for trade finance, and marine cargo insurance. As of the end of 2013,
TradeXchange® had enabled the industry to achieve accumulated manpower saving equivalent to 28.9 million Singapore dollars (approx. 17.8 million euro). One such example is IBM (see the IBM boxout).

What’s next?

Singapore Customs is currently working to re-invent TradeNet® and TradeXchange as an update to its national trade infrastructure. For instance, a study is now underway to look at ways to make TradeNet® more business-friendly with new features. The Director-General of Singapore Customs, Ho Chee Pong, stated that “Singapore Customs is committed to continuously improving our national trade infrastructure to bring about greater synergies across the supply chain in deepening the integration of Singapore’s trade and logistics IT systems, processes, and information.”

More information
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IBM raises productivity by 82% through TradeXchange® integration

**IMPROVED TURNAROUND TIME, efficiency through integration of processes, and reusing approved permit data saves IBM 130,000 Singapore dollars (approx. 80,000 euro) a year!**

Trade permit application is often a manual and tedious process for many shippers, and retrieving copies of the approved permits from various Logistics Service Providers (LSPs) adds to the time consumed.

To improve turnaround time and increase efficiency, IBM implemented the use of the TradeXchange® Trade Permit Preparation and Permit Return Service, integrating trade declaration processes, and reusing the approved permit data for subsequent operational processes.

**Challenge: 100% accuracy in permit declarations**

IBM is a global technology and consulting corporation with revenues running into the billions. IBM Ireland Product Distribution Limited (IBM IPDL) in Singapore has shipments that include strategic goods, which demand 100% accuracy in permit declarations.

To fulfil this critical requirement, IBM IPDL had to put in dedicated resources to ensure the accuracy of permit declarations to Singapore Customs. In an effort to increase productivity and improve trade declaration turnaround time, IBM IPDL and their LSPs, through their respective TradeNet® Frontend Providers, integrated their trade declaration processes with TradeXchange®, eliminating the need for manual data re-entry.

**Improved data accuracy, faster processing time**

Before the implementation and integration with TradeXchange®, IBM IPDL had to email and/or fax shipping documents to their LSPs to apply for permits from Singapore Customs. This typically took an average of 578 man-hours each month for IBM IPDL to prepare the documents, and for their LSPs to re-enter the information for declaration purposes, and to compile and generate monthly reports for submission to Singapore Customs.

Following successful integration with TradeXchange®, there has been a significant time reduction of 82%, using an average of only 102 man-hours each month to complete the whole process. This solution allows IBM IPDL to extract the relevant shipping information from their Enterprise Resource Planning (ERP) systems and send it over to TradeXchange®. Their LSPs would then login to the TradeNet® Frontend System to add to the auto-populated information before submission to Singapore Customs for approval. IBM IPDL now receive all their permits electronically and instantly upon approval via the TradeXchange® Permit Return Service.

This Permit Return Service greatly facilitates IBM IPDL’s reporting and reconciliation efforts by allowing the extraction of data from the approved permits for cross-checking and tracking in their ERP systems. Overall, this service saves IBM IPDL an approximate total of 5,712 man-hours annually, translating to some 130,000 Singapore dollars in cost savings.

Goh Beng Chee, Senior Manager (Business Controls, Finance) at IBM IPDL said, “Through integration with TradeXchange®, we have effectively increased our productivity by more than 80%. Stakeholders and partners have also taken the opportunity to streamline their work processes, leading to better customer satisfaction.”