Implementing New Zealand’s Joint Border Management System

NEW ZEALAND’S ECONOMIC competitiveness relies on efficient and secure supply chains, and its reputation as a trustworthy trading partner and a popular tourist destination. The country’s border management is among the best in the world.

Each year the New Zealand Customs Service (NZCS) facilitates over 150 billion New Zealand dollars (NZD) in trade, handles 50 million mail items, and processes approximately 10 million travellers, as well as collecting over NZD 11 billion in revenue. The Ministry for Primary Industries (MPI) manages the biosecurity risks posed by cargo, craft, passengers and mail items, including the risks associated with imported food.

Together, over the past four years, the two authorities have been developing a Joint Border Management System (JBMS) to modernize and integrate border clearance processes for people, goods and craft, as well as improve data and technology sharing between the NZCS, the MPI and other agencies with an interest in border security.

Development of the JBMS is partly funded by the central government and through baseline funding provided by the NZCS and the MPI. Industry is also required to fund some of the costs of the JBMS, through transaction fees.

The JBMS has two key components:

• the development and implementation of the New Zealand Trade Single Window (TSW) and other craft and cargo processing components, which connect to existing systems;

• the foundation for advanced risk and intelligence (R&I) capability, including new tools to provide sophisticated data mining, risk rating and pattern analysis.

The TSW uses electronic craft and cargo reporting and clearance messages based on Version 3.2 of the WCO Data Model (WDM3). This enables information to be harmonized across border agencies, and will also improve risk management and the facilitation of compliant trade. New Zealand border agencies have been closely involved in the development of the WDM3, New Zealand being one of the first countries to adopt this new standard and use its new message formats.

Within New Zealand, the TSW enables more information to be shared electronically with industry partners, such as ports and transporters, to support logistics planning.

In the longer term, the TSW provides the foundation for better trade facilitation through country-to-country data sharing, an objective of both the WCO and the Asia Pacific Economic Cooperation (APEC) bloc. It also meets the WCO’s ‘Customs in the 21st Century’ challenges concerning Coordinated Border Management (CBM) and the Globally Networked Customs (GNC) concept.

Key achievements to date

A significant proportion of the new TSW has been delivered for food safety, biosecurity and Customs purposes, immediately making it easier for industry to do business with government: four of the top five lodge ment types (the term used to describe the different sets of information required by border agencies to assess risk, collect revenue and/or release goods entering or leaving New Zealand) account for 71% of transaction volumes, i.e. import and export declarations, and inward and outward cargo reports.

Over 1.4 million inward transactions from traders have been processed via the TSW in the first 18 months since its launch. Around 60% of inward transactions are completed via the TSW and 100% of outward messages are sent through the TSW. Median processing times remain under 20 seconds per transaction, and volumes continue to increase.

While the majority of the advanced R&I functionality will be launched towards the end of the delivery schedule, offline data analytics R&I software is being used by a joint NZCS and MPI data analytics team. A simplified module has also been implemented to support R&I capability for food import declarations.

Next steps

Work is underway to deliver the remaining TSW functionality over the next 18 months. At present, NZCS issues client codes to importers, exporters and overseas suppliers, and to organizations or individuals who want to submit messages to the system. These are currently applied for on forms that are generally faxed or emailed to NZCS for data entry.

A six-week pilot with selected traders is to begin shortly, allowing them to apply for their own client and supply codes online and manage some of their own information. Applications for most supply codes will be reduced to minutes from the current 24-working-hours service target, and there will be a quicker turn around for client code applications too. For users who meet quality and reliability standards over time, automated approval of some client code types will be possible, as some applications will be able to be processed after hours.

Rema ining TSW lodgement types are being developed and should be available to industry by the end of 2015, thus completing the TSW. It is important that more traders begin to use the WCO Data Model so that Customs and the MPI can gather richer and more accurate data for R&I analysis. There will, however, be a transition period before the use of WDM3 messages becomes mandatory for industry.

The focus of the NZCS and the MPI remains on developing a real-time R&I model that will facilitate the collection, evaluation and analysis of data, enabling Customs and the MPI to quickly determine the appropriate operational response to possible risks.

Supporting coordinated border management

The JBMS is expected to deliver significant benefits to importers, exporters and others in the international trade supply chain. It will also drive changes to service delivery in New Zealand, through more integrated and easily accessible services.

For government, the JBMS will provide a new capability to strengthen existing services and manage the border more effectively:
The close relationships established by New Zealand’s thematic experts at meetings of the WCO Data Model Project Team (DMPT) were invaluable in assisting with problems and gaining knowledge and tools to do the work.

Being the first to fully adopt the WDM3 enabled New Zealand to pick up any flaws, making it easier for the WCO to improve the Data Model. However, this did delay the implementation of New Zealand’s own programme while ‘maintenance requests’ were raised with the WCO. Although these delays were unavoidable, it does highlight the risks of being the first to use a new model.

**Developing risk and intelligence capability**

Given the challenges posed by a constantly changing border environment with increasingly sophisticated risks, New Zealand found that it was unrealistic to try and develop the R&I component in a single phase.

R&I is now being undertaken in smaller iterative releases to ensure that the most appropriate elements are prioritized, created and enhanced as the knowledge and skill level of Customs and the MPI increase.

New Zealand has learned that R&I is expensive and complex, with long-term challenges, which can be minimized by collaborating with other organizations. The R&I workstream is now being supported by engagement with other government agencies, to leverage their experience and expertise in developing similar business products, as well as improving understanding across government.

A more sophisticated R&I system requires staff with different skill sets, and this takes time to develop. It is, therefore, important to invest strongly in developing human capability early on in the programme.

**Stakeholder engagement**

Support from industry and central government agencies has been essential to the programme’s success, and this support was actively sought.

Internal and external stakeholders have been involved throughout the design and development phases of the JBMS, which is key to getting the design and delivery right. The use of a select group of pilot partners enabled the JBMS programme team to work closely with industry to find and resolve issues.

Early consultation with major industry stakeholders indicated that there was general support for the JBMS. Strong relationships and consultation ensured that industry accepted the cost recovery principle. An increase in transaction fees was largely facilitated through stakeholder involvement and the focus by authorities on the benefits and value, rather than the costs. In time, the benefits for industry will exceed the increased charges.

The NZCS has also improved its focus and capability in managing its contracts for the JBMS programme. This includes elements such as delivery and procurement, change management, responsibilities, and costs.

**Leading a major joint programme of work**

Although the NZCS is the lead organization for the JBMS, dual ownership of the programme with the MPI has led to a unique acquisition of knowledge.

It was important for each side to understand their shared attributes and their own unique features, to enable them to mutually recognize each other’s contribution. The impact of differences in organizational culture was under-estimated and not identified until the JBMS programme was well underway.

The MPI and the NZCS will continue their partnership with joint ongoing management of the JBMS when it is in full operation. It will thus be important to have clarity and agreement regarding the management model for joint services between all the agencies involved.

**Knowledge acquired**

Large IT system change is challenging and New Zealand has learned a number of things that will be useful for other jurisdictions considering the development of their own trade Single Window (SW).

**Opportunities and challenges: implementing the WCO Data Model**

The close relationships established by New Zealand and the MPI of New Zealand’s trade and biosecurity, benefiting the economy and all border stakeholders;

- the JBMS will provide better value for money through multi-agency use of capital assets and more efficient agency processes;
- the JBMS will help support New Zealand’s trade policy objectives and obligations.

Industry too will benefit from a single point of data submission to government border agencies, cutting out costly duplication. The potential benefits for industry will depend on how individual participants use the information from the TSW to increase their supply chain efficiency. The NZCS will also have to consider how it can help industry to realize the benefits.

Use of the new WCO Data Model allows New Zealand to improve border security data collection and its ability to integrate with its partner countries, by implementing the WDM3 message standards in their entirety. It also enables the country to collect higher quality and richer data, which in turn allows more targeted, accurate risk and intelligence interventions, and better business analysis.

Some JBMS benefits are already being realized. These include a reduction in staffing costs for the NZCS and the MPI, as well as minimizing the risk of the possibility of software failure of existing border information technology (IT) systems.

**More information**

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