Collaborative border management

Tom Doyle

Abstract

Traditionally, the role of Customs and other border management agencies has been the ‘gatekeeper of the border’. This article identifies that the collaborative border management (CBM) approach can, if properly designed, implemented and adequately resourced, deliver a range of benefits to government and the private sector. Agencies and the international community need to work together to achieve common aims that benefit all parties. CBM features the concept of a ‘virtual border’ encompassing the entire transport and supply chain where goods and passengers can be assessed for admissibility and clearance in advance of arriving at the physical border. The key components of CBM are discussed: policy, process, people, technology infrastructure and facilities.

Introduction

The aim of this article is to present a new approach for the way in which border processing and clearance could operate in the future. While there are a number of concepts frequently discussed in border management literature, this article brings together the key elements of these into a holistic set of new approaches collectively known as Collaborative Border Management (CBM). The concept of CBM and its implementation considerations will be further explored in the context of a World Bank publication ‘Border Management Modernization – A Practical Guide for Reformers’ to be published in the near future.

Background

Traditionally, the role of Customs and other border management agencies has been the ‘gatekeeper of the border’. Customs and other border management agencies are likely to continue to perform a vital community protection role in terms of preventing international terrorism, a fiscal role in terms of tax collection, and an environmental and social role in terms of protecting public health and cultural heritage. However, a strong shift in emphasis towards facilitation and competitiveness is likely.

The current Doha Round of World Trade Organization (WTO) negotiations and certain publications of the World Bank (Doing business and connecting to compete: logistics performance index) have also increased global awareness of the important contribution that improved border management procedures can make to economic development and poverty reduction. This is achieved by reducing unnecessary red tape and facilitating the cross border movement of goods.

Border management agencies are now working in an environment of increased expectations from the private sector. There is a heightened awareness of costs and this has generated political pressure for competitiveness as countries vie to attract trade and tourism. Against this background of cost and efficiency improvements there is still a need to maintain good governance and integrity and meet ever increasing policy and procedural requirements.
Customs and other border management agencies are now required to respond to these challenges and deliver a wider remit of services and improved efficiency, often against a backdrop of decreased funding. Customs’ reforms alone will not address the challenges as it is only one of the border management agencies involved in clearing goods and passengers. Information is still typically collected and stored individually by each border agency involved in the clearance process and this information is rarely shared across the agencies. There is little direct interaction between border management agencies. The burden is placed on the customer to supply similar sets of information, frequently in a variety of electronic and paper based forms, to multiple agencies. The multiple agencies then individually process this data before regulatory requirements can be completed for admissibility and clearance.

The importance of achieving higher levels of export-led economic growth will continue to put customs and other border agencies under the ‘spotlight’. This will create opportunities for these agencies to demonstrate their willingness and capability to contribute to this competitive environment.

A holistic ‘end-to-end’ approach to border management reform increases the likelihood of success in overcoming the range of political, institutional and operational problems that have to date proved extremely difficult to manage. Reform efforts extending beyond single organisational entities have to ensure that they are not hampered by narrow sectional interests. Allegiances to a single organisation should not overshadow the achievement of wider national objectives.

It is inevitable that the pace of reform by some of the major trading countries, as well as their onerous demands are likely to continue to stretch the administrative capacity of developing countries, particularly the Least Developed. In this regard, it is important to recognise the capacity constraints which often hinder effective cooperation within the network of Customs and border management agencies.

Agencies must deliver improved efficiency, defined outcomes, greater facilitation, increased regulatory control, enhanced security, improved data sharing – nationally and internationally – all against a backdrop of static or decreased funding.

Collaborative Border Management (CBM)

The Collaborative Border Management (CBM) concept is based on the premise that agencies and the international community need to work together to achieve common aims that benefit all parties. It features the concept of a ‘virtual border’ encompassing the entire transport and supply chain where goods and passengers can be assessed for admissibility and clearance in advance of arriving at the physical border. CBM becomes increasingly effective as border management agencies gather, collate and share more data. This can be used to create a complete view of risks and opportunities, encouraging a knowledge sharing culture and a border management strategy built on proactive decision making.

The foundation stone for CBM is relationship management with the trading community, regulatory authorities and collaborative engagement with transport/supply chain partners. Through a combination of ‘customer segmentation’ and ‘intelligence driven risk management’, the clearance (that is, admissibility processing) of goods and passengers can be carried out electronically in advance of physically reaching the border. Customer segmentation enables the border agencies to tailor information and services according to the specific needs of different customer groups. Intelligence driven risk management enables border agencies to accurately carry out pre-arrival/departure identity assurance and eligibility entitlements of trusted traders or passengers, and to carry out targeted intervention of others. A single common source of regulatory admissibility and pre-clearance information is made available to all relevant border management agencies, partners and customers through a collaborative information portal (for example, Single Window).

Within the CBM concept, ‘trusted clients’ such as Authorised Economic Operators (AEO) and members of Trusted Traveler Programs are entitled to facilitated and streamlined border clearance facilities.
They may even be allowed to discharge their regulatory obligations in a differentiated way such as pre-
arrival clearance processing through identity management systems or through third party compliance
information verification systems.

CBM enables border management agencies to work in close collaboration with each other, forming an
‘inter-agency approach’. CBM can be achieved under the jurisdiction of a single border management
agency. However, the creation of a single agency in itself is not necessarily the only or the best solution.
Typically, an overarching governance body is created charged with facilitating the establishment of
an overall border management vision and ensuring that all stakeholders are involved and are working
together to achieve the common vision. Strong political will and commitment and the establishment of
an appropriate incentives/disincentives framework to underpin and support progress are essential for
the success of CBM. This structure preserves the independence and specific mandates of Customs and
other agencies involved in border management. The successful implementation of CBM results in more
appropriate treatment of traders and passengers as a result of more thorough and accurate data collection
and analysis. There is reduced compliance verification documentation required at the point of border
entry. CBM ultimately delivers lower costs and greater control to border management agencies.

CBM enables low risk persons and cargo to move uninterrupted across borders where there is a
political will, an administrative capacity on the part of border agencies, and a culture of compliance and
collaborative partnerships. At the same time, enforcement controls can focus on higher risk individuals
and cargo, with much of the decision making happening at the ‘virtual border’ stage. Each of the border
management agencies benefits from adopting the ‘customer-centric view’ that underpins the CBM
concept. By collating previously distributed and perhaps individually incomplete information into one
body of common inter-agency information, border management agencies can form a more complete and
accurate view of a client or customer and their compliance history. This enables them to make better
informed eligibility and compliance management decisions.

This collated information also benefits the customer. CBM harmonises border management procedures
between Customs and other border management agencies. The holistic view of border management
results in reduced administrative and compliance costs, as well as increased time savings and ultimately,
a more efficient and favourable customer experience. Achieving this requires commitment and proactive
collaboration between the border management agencies and a governance structure that effectively
coordinates border operations, aligning each of the agency’s roles and responsibilities and ensuring the
successful implementation of the change process.

CBM makes possible a set of defined business outcomes. Distinctive border management agency
operations can make a real difference to citizens, the business community and the country as a whole. It
creates a more customer friendly and more responsive environment. Objective measures of performance
can be set for all key result areas.

Key components of the CBM concept

The key components of CBM are discussed here under policy, process, people, technology infrastructure
and facilities. Many of the practices highlighted are already being achieved in some countries through
discrete reform initiatives. The difference with the CBM model is that it brings together these innovations
and there is a major transformation achieved through the ‘holistic and collaborative end-to-end’ approach.

Policy

CBM enables a shift of primary focus by border management agencies, from a balanced and weighted
approach to control and facilitation, towards one of optimised trade cooperation and regulatory control.
CBM recognises that the vast majority of travel and trade is legitimate. By establishing trusted partnership
arrangements, more effective customer service can be delivered. CBM enables more comprehensive
compliance management which results in agency staff operating more efficiently, targeting high-risk
passengers and consignments for intervention. They also benefit the competitiveness of the trusted
customer by creating an environment in which visible and tangible benefits accrue to compliant
customers. There are equally visible enforcement sanctions which discourage the less compliant.

The implementation of CBM demands improved **intergovernmental and inter-agency networking
arrangements**. Networking arrangements allow border management agencies to cooperate effectively
with a set of common and agreed standards. Information is centrally located and a single view of each
customer is provided, while customer segmentation allows the agencies to deliver enhanced ‘value
added’ services. There is a special emphasis on the sharing of value added compliance management
information between countries rather than a reliance on individual transactions.

CBM takes advantage of the availability of information at the earliest point in the transport and supply
chain at which border management agencies can become involved. This could be at a factory while
goods are being packaged for shipment, the point of the departure from a port or airport, or indeed at any
point before the physical destination border is reached. By ensuring compliance at the ‘virtual border’
stage, the length of time required for clearance at the physical border is minimised. Border management
agencies can then focus their attention on surveillance and intelligence led targeted intervention of higher
risk shipments and passengers.

**Processes**

CBM requires border management agencies to define ‘outcome’ based processes such as increased level
of customer compliance, export competitiveness, etc., rather than focusing on ‘output’ based processes
such as the volume of transactions for compliance verification. By looking at desired outcomes from
both the agencies’ and the customers’ points of view, processes can be defined which satisfy both sets of
needs. In addition, by looking at border management operations as a whole, certain common outcomes
such as the fight against counterfeiting can be identified, creating opportunities for efficiency gains and
more cost effective service delivery developments.

CBM enables a single view of the customer, allowing border management agencies to cooperatively
analyse and assess information and make more informed and rigorous decisions. It streamlines and
simplifies the interactions of customers that interact with multiple border management agencies.
Services can be designed both to improve the customer experience across all interactions and to reduce
duplication of effort across multiple agencies.

Intelligent analysis of data at a customer level also enables border management agencies to concentrate
on auditing higher risk customers and shipments. Trusted customer relationships are developed and
information is shared across the agencies. This allows greater efficiencies when, for instance, an
individual or piece of cargo interacts with multiple border management agencies numerous times on a
single voyage.

**People**

CBM demands that border management agency officials are well equipped with the skills, knowledge,
and behaviour they need to manage the new processes correctly. The role of skilled, experienced and
committed officials remains the driving force for addressing the challenges that border management
agencies face in achieving their goals.

A comprehensive capability assessment can result in a set of recommended transformation actions. These
could include, for example, the introduction of organisational change, such as the **outsourcing**
of certain functions. It could result in the introduction of a business change management program. This
would enable border management agency staff, whose previous responsibilities may have become less essential as a result of CBM policy and processes, to operate in a more effective manner in their new areas of responsibility. Staff should be trained and designated to perform cross-agency tasks where appropriate, eliminating redundancy, reducing duplication and creating efficiencies in customer service.

**Information technology**

CBM promotes the technical development and interaction that is needed for more effectively sharing information and identifying risks. CBM implies significantly closer national, regional and international collaboration among other government agencies and the international travel and transport industries. This can be achieved through the use of technology and systems that share and link information. In addition, bilateral, regional and multilateral agreements that facilitate policies and strategies for collaborating, sharing information and developing interoperable systems may be required.

When information is integrated across the border management operations, border management agencies can become intelligence-driven. Existing technologies and working methods enable the rapid conversion of structured and unstructured data into the actionable intelligence needed to analyse potential threats and proactively communicate alerts to the staff engaged in enforcement activity.

The timely and effective processing of clearance and interoperability of border operations is difficult to achieve with traditional databases and database queries. It requires a vast amount of data to be analysed and executed within minutes. The range of available data may also be erroneous (for example, names misspelt or self-supplied incomplete data), non-specific (for example, multiple common or similar names) and lack international standards (for example, what is required in one country may not be required in another).

‘Fuzzy logic’ can improve the identity and compliance management process by helping border agencies to differentiate based on characteristics that may also be non-precise, absent, or wrong. Matching with fuzzy logic is particularly useful for finding information that best fits diverse and complex conditions such as accessing large amounts of stored data in multiple data formats, for example, structured, unstructured, image and biometric coding. It returns a result of the percentage of a match made rather just returning exact matches. Close, but not exact matches, can be identified and prioritised. This greatly increases the chance of successful identity management and pre-clearance admissibility decisions prior to arrival at the physical border. It also improves the effectiveness of other compliance management functions such as surveillance and investigation.

**Interoperable** systems and business processes facilitate seamless operations across countries, organisations and other boundaries. By linking both structured and unstructured information across the border management agencies, individual agencies are able to overcome redundant processing and the inefficiencies inherent in standalone or ‘stove-piped’ information silos.

**Infrastructure and facilities**

Infrastructures at points of entry often have designs that predate today’s security, trade and travel demands and priorities. Such facilities often suffer from inadequate capacity and infrastructure. The upgrading of these facilities in collaboration with both other border management agencies and neighbouring countries is an important step in cost effectively improving regulatory control and trade facilitation.

CBM enables the creation of a shared services environment whereby a collaborative operating model and facilities could be created on the basis of industry ‘leading edge’ practices. Significant economies of scale can be realised through participation. In a regional setting, a shared service environment could deliver cost savings in terms of (a) the agency specific development national costs, (b) the inter-agency development national costs and (c) the costs nationally and regionally of maintaining the support.
technologies. A **shared service** approach must have a common vision and orientation towards delivery and service levels. There must be strong performance metrics and a culture of continuous improvement.

Such an approach would require some consensus on what is an efficient and effective operating model and agreement as to the common core processes to be managed under a shared services arrangement. A shared services approach would allow participating agencies to rapidly reach the capability level of the most efficient agency and reduce their operating costs. The advantage to the leading agency is that it gets to set the pace of modernisation. In reality, governments and their border agencies are typically at different stages on the ‘transformation’ journey. Modern day technologies and facilities have now matured to the point where shared service approaches could dramatically improve the lot of border agencies and the customers they serve. It is now more a question of the political will to look more seriously at this and other new ways of infrastructure and facilities management.

**Outsourcing** also provides a means to specialised services in a more cost effective manner that can best utilise resource availability. This could include the management of technology-intensive areas such as application outsourcing to control ICT development costs or technology infrastructure outsourcing where hardware and associated ICT services are contracted out. It allows border management agencies to concentrate on the improvement of core business strategies.

However, it important, as with any strategic delivery option of products or services, to understand the issues and risks associated with outsourcing. Once again, as with the shared services option, the principal barrier to the adoption of outsourcing is the understanding of border agencies about the value for money of this approach and their willingness to change their procurement policy.

A **public private partnership** (PPP) refers to a contractual agreement formed between a public agency and private sector entity that allows for greater private sector participation in the delivery of many types of projects. A Single Window development lends itself to a PPP operating model. Core functions are converged and streamlined to benefit all border management agencies using these services. As an example, a shared document management function could reduce the rate of growth of documentation stored by the border management agencies to more acceptable levels.

**Conclusions**

Government benefits from the CBM approach through a lower cost of the overall border management operation with more effective and efficient deployment of resources. There is improved trader and passenger compliance, with increased integrity and transparency. Security is enhanced with improved intelligence and more effective enforcement. The country is more competitive where legitimate trade and travel is facilitated and clearance procedures are more predictable and certain.

The private sector benefits from the CBM approach with faster and more predictable clearance and release timings and payments. Their resources can be deployed more effectively and efficiently as a result of the more predictable release times. There is also an increase in transparency.

Policy makers frequently believe that they have to make the choice between regulatory control and trade facilitation. However, CBM challenges this, creating a more transparent, industry-friendly regulatory framework which promotes competitiveness and growth while at the same time ensuring regulatory compliance – a genuine ‘win-win’ situation.

The CBM approach can, if properly designed, implemented and adequately resourced, deliver a range of benefits to government and the private sector. There is an increased public awareness of the importance of maintaining good border management governance and integrity. This is coupled with clearly articulated policies and procedural requirements and commitments directly related to regional and international agreements. There is prompt and predictable clearance processing for compliant traders and passengers. There is transparency of costs and the country achieves a more competitive position for attracting foreign
investment. The more responsive border management operation has a central role in protecting society from a range of threats to national security.

For CBM to be effective, border management agencies should develop a *common vision and an inter-agency approach* to its delivery implementation. Even when regulatory control and facilitation activities are distributed across multiple agencies, all of the functions and organisations should be aligned around the *same mission*. They should work together to achieve the *same goals*, and should integrate their respective information seamlessly within the requirements of data protection and privacy legislation. Grouping these agencies into a Single Border Agency may provide an impetus for adopting the CBM approach and direction. However, the underlying coordination barriers will still need to be addressed. Success requires a *clearly defined strategy* across border management functions, the policies to support this strategy, and a *governance and leadership* structure that provides continual, clear direction. A comprehensive *collaborative business architecture* that ‘defines the optimum capabilities, organisation structures, processes, competencies, technology and infrastructure’ is required to support the accomplishment of the inter-agency missions.

The way ahead for CBM is to transform the way border management agencies do their business thorough *intergovernmental and inter-agency networking arrangements* and through *partnerships* with their customers. Networking arrangements allow border management agencies to cooperate effectively to a set of common and agreed standards. *Customer segmentation* allows the border management agencies to deliver enhanced services to compliant customers and focus their scarce resources on more *value added intelligence and risk driven interventions*. Countries will receive security and compliance management benefits from the creation of such arrangements, and opportunities will be provided for more developed countries to *share facilities*, knowledge and *capacity building* with those who are less developed. The developed nations also benefit from the increased sophistication and performance of their previously less developed partners. Unlike in the business or military world, where actors strive to gain a competitive advantage against their rivals, CBM creates a ‘*win-win*’ situation whereby the strengthening of a partner’s capacity reduces pressure on their own capacity.

---

**Tom Doyle**

Tom Doyle is currently working at the International Trade department of the World Bank as a Senior Border Management Specialist. He has spent 32 years working within the domain of Customs and Border Management where he has held a number of positions within the Irish Revenue Commissioners, the European Commission, the Cyprus Government, and with the international consultancy company Accenture. During this time he has worked extensively in all areas of customs policy and strategy but is best known for his work within the ICT environment where he has provided technical assistance and support to a number of countries in Asia, Africa and Europe as an official and as a consultant. He has also authored a number of papers including ‘Customs 2020’, ‘Outsourcing as a strategic delivery option for Customs’ and more recently, co-authored the World Bank’s border management handbook, *A guide for reformers*. 