

Coordinated Border Management



**An inclusive
approach
for connecting
stakeholders**



enp@wco.org

Contents

CHAPTER 1: WHAT IS COORDINATED BORDER MANAGEMENT	3
CHAPTER 2: FUNDAMENTAL CONCEPTS IN COORDINATED BORDER MANAGEMENT	9
CHAPTER 3: IMPLEMENTING COORDINATED BORDER MANAGEMENT	12
CHAPTER 4: THE REVISED KYOTO CONVENTION AND COORDINATED BORDER MANAGEMENT	22
CHAPTER 5: WCO INSTRUMENTS & TOOLS FOR CBM	28
CHAPTER 6: OTHER ORGANIZATIONS' INSTRUMENTS & TOOLS.....	39
Annex: Country Practices & Experiences	48
United States of America - Border Interagency Executive Council.....	48
Singapore: TradeNet, Singapore's National Single Window.....	50
Germany: Coordinated Border Management between Border Guard and Customs administration	54
Hong Kong, China: Road Cargo System (ROCARS)	57
Canada: Collaboration between Canada Border Service Agency (CBSA) & Canada Post Corporation (CPC).....	59

CHAPTER 1: WHAT IS COORDINATED BORDER MANAGEMENT

1.1. Coordinated Border Management – A New, Old Concept?

Coordinated Border Management (CBM) refers to a coordinated approach by border control agencies, both domestic and international, in the context of seeking greater efficiencies over managing trade and travel flows, while maintaining a balance with compliance requirements.

The CBM concept is not a new one. The WCO had published the Customs Compendium for Integrated Border Management in 2006 that outlines the key elements of an Integrated Border Management System, as well as planning and implementation issues. Many of these elements addressed in the Compendium published in 2006 are still relevant today. Over the years, variations of the term had surfaced across various forums. It is known as “Integrated Border Management” by the European Union, “Collaborative Border Management” by the World Bank and “Comprehensive Border Management” by the OSCE.

These terms all refer to very similar things, which is essentially the holistic approach involving all cross-border regulatory agencies so that their regulatory functions are discharged in a coordinated manner.

In this compendium, the term “Coordinated Border Management” was adopted in favour of the former name “Integrated Border Management” due to the fact that “Integrated” seemed to pre-suppose structural and institutional integration, which potentially narrows the scope of the concept – the WCO believes that CBM is much broader in the sense that resources, functions, processes and legislations have to be mobilized around a shared vision of effective and efficient border management and there are several solutions to achieve that where an integration of services is just one of the option.

1.2. Level of Formality in Collaborative Interactions

It is likely that all Cross-Border regulatory agencies engage with each other to varying degrees – interactions can take place between individuals at a personal level, or they could be encapsulated into work instructions, operational arrangements, or in more formal settings, defined through laws, regulations and agreements. Coordinated Border Management is more focused with the latter.

Figure 1 aims to illustrate the gradual elevation in terms of the formality that defines inter-governmental collaboration and the differing nature of such relations, as the level of formality increases. It is posited that while ad-hoc and informal arrangements exist, and can do some good in improving the situation at the border, they are unsustainable and will very quickly reach a point of diminishing returns. Informal arrangements that are not structured and backed by official arrangements also give rise to unpredictability and irregularities that can detract from good organizational governance and accountability.

and this can only be done if cross-border regulatory agencies coordinated their operations to reduce duplications and delays for traders.

But CBM is not just about benefitting trade through more streamlined procedures and less hassle. Through greater collaboration, cross-border regulatory agencies will also be able to tap on shared resources and leverage on capabilities that are not organic to the administration and achieve greater effectiveness in their regulatory functions by tapping positive synergies. This enables cross-border regulatory agencies to better respond to emerging threats and further enhances the value preservation role of cross border regulatory agencies to the trading community.

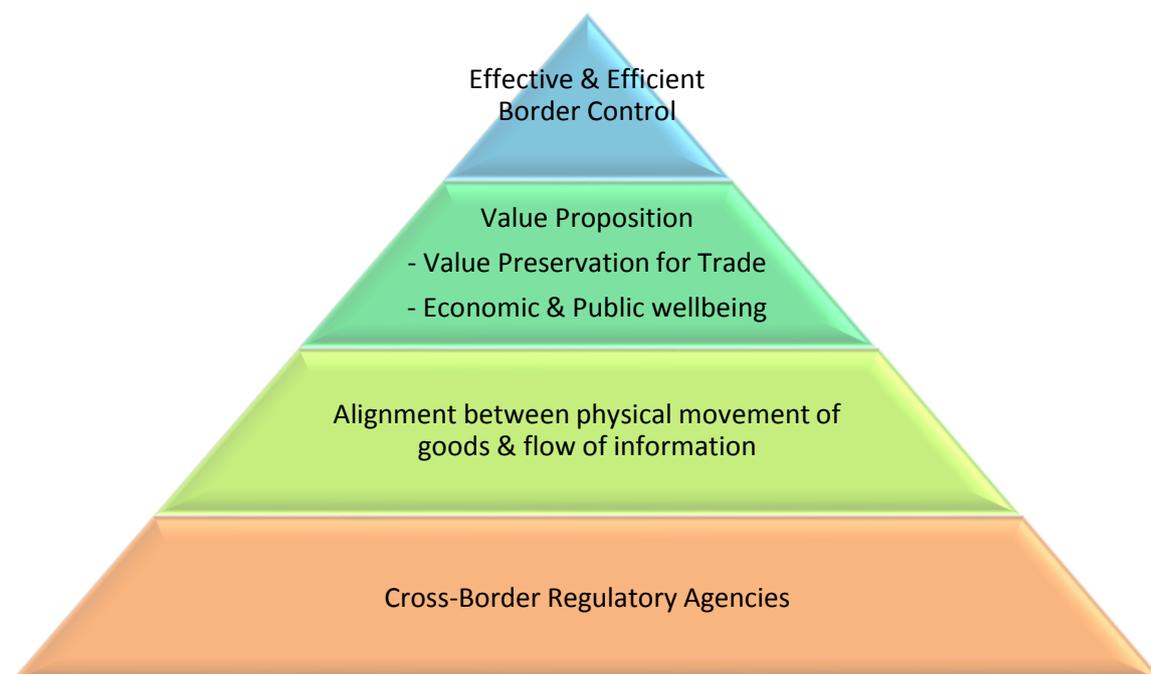


Figure 2: Alignment of Vision for Coordinated Border Management

As shown in Fig 2 above, CBM emphasises the need for alignment between the functions of the various cross-border regulatory agencies through the 2 key CBM areas – the physical movement of goods, and the flow of information in order to maximize the value proposition of border regulatory functions. This alignment brings about the desired outcome of an effective and efficient border control system.

1.4. Multiplicity of Agencies at the Border

The multiplicity of agencies at the border is a fact in the contemporary regulatory environment, and it is rare for a single agency to be able to take responsibility for upholding the regulatory requirements for all manner of goods, acquire all of the functional and material competencies required to effectively discharge this responsibility and make all of the decisions necessary relating to regulatory control at the border. Specialization of competencies and specific allocation of responsibilities remains an important factor in many border crossings and this, in itself is not a bad thing. What is essential for any cross-border regulatory system to work well is for cross-border regulatory agencies to compare their

missions, locate redundancies and identify aspects that contain little added value in terms of border procedures.

The outcome of this effort can and will vary. In some situations, it had led to the creation of a single border agency that is mandated to carry out all border related functions; in other situations, it has resulted in the cross training of inspectors so that one inspector can carry out the primary functions of several agencies and only has to refer to the other agency in cases of doubt or special circumstances, or for inspectors to conduct the necessary checks all at the same time, so that goods do not have to be checked more than once. Such developments are ultimately shaped by the unique situation facing each agency, or even within different border crossings within the same country.

1.5. Coordinated Border Management as a Response to Resource Scarcity

All cross-border regulatory agencies must find ways to use their limited resources in the most effective manner possible. Coordinated Border Management enables cross-border regulatory agencies to leverage on the strengths and resources of different agencies to overcome resource scarcity.

Resource scarcity refers to:

- (i) The scarcity of time to ensure value preservation for legitimate trade, and effective control on high-risk cargo
- (ii) The scarcity of manpower and competencies to conduct the necessary border control functions
- (iii) The scarcity of information to determine the risk-status of cargo
- (iv) The scarcity of land and other fixed assets necessary for effective border control
- (v) The scarcity of equipment and other movable assets necessary for effective border control

The first three factors – time, manpower and information are typically consequences of process design and can be addressed through process re-engineering. The fundamental approach is for cross-border regulatory agencies to identify synergies and maximize the use of the limited resources available at their disposal, and through this synergy, achieve a holistic approach that performs at a level significantly higher than the mere sum of its individual parts.

Tangible actions to address such scarcities includes process reengineering, so that procedures can take place concurrently instead of consecutively, cross-training and empowering manpower, so that personnel from one agency can perform the checks of other agencies, and sharing of information, so that agencies can engage in shared-decision making to identify high-risk cargo for control.

The last two factors, fixed assets and equipment are more intractable issues and it is clearly not possible to re-build physical infrastructures that fulfil all the requirements of all cross-border regulatory agencies. It is also intrinsically linked to the three factors mentioned above: it is posited that if processes are streamlined and resources shared, maximum effectiveness can be derived from facilities and equipment.

Tangible actions to address such scarcities includes the sharing of non-intrusive inspection equipment and inspection bays, since a coordinated risk management approach would already reduce the number of unnecessary checks and less space will need to be catered for inspections. This results in a smoother flow of goods through the border facility that will reduce congestion and waiting time. If congestions can be mitigated, fewer personnel need to be present in the first place and the surplus manpower can be re-deployed to other priority areas.

Where new construction is envisaged, one method which has been used to address the large cost of constructing border control points is for the neighbouring countries to build a common facility where both Customs and other border agencies work side by side. In this manner, the legal and policy issues of officers working in another country are avoided and the cost of constructing border facilities is reduced.

Some administrations have also found it practical to provide the legal basis for their neighbouring country's Customs officials to perform certain activities on their behalf. In practice, this has resulted in one Customs official performing the export checks to satisfy his country's requirements and then performing the import checks of the importing country. The goods are released for export and import in one series of checks.

The WCO Framework of Standards to Secure and Facilitate Global Trade (also referred to as the SAFE Framework of Standards) is partially based on a Customs-to Customs Pillar and has an Annex containing standards that deal with Customs-to-Customs Network Arrangements.

Non-intrusive examination equipment is extremely expensive. Administrations should consider sharing the use of this equipment with their neighbouring country to help reduce this large capital outlay. The use of detector dogs could also be shared amongst adjoining countries.

The pre-clearance of passengers and goods has proven to be an effective system to reduce the release time for goods and travellers. Pre-clearance involves the stationing of a Customs official in the departing country and this official performs the Customs and Immigration functions for his country in the foreign country. When the passengers arrive at the destination country, they are treated as domestic passengers and are able to leave the premises in a timely fashion. Less congestion at airports permits the construction of smaller terminals. Similarly, goods can be pre-cleared resulting in less congestion in terminals.

Other areas that are not specifically within the purview of Customs but affect Customs operations could be reviewed to reduce the costs for administrations. As an example, in many administrations, Customs is required to hold goods until various internal certification processes have been completed. Administrations could give consideration to granting equivalence to the exporting country's certifying body and then Customs would be able to release the goods after having checked the accompanying certificates (rather than be required to hold them until the national certificate has been obtained).

1.6. Applications of International Standards in Coordinated Border Management

The adoption of international standards leads to simplification and harmonization. The WCO has developed many standards ranging from very technical ones pertaining to data (WCO

Data Model) to operational ones (the Revised Kyoto Convention). The use of international standards in Customs environments adds to the effectiveness of Customs and the Coordinated Border Management System. Common international standards allow private sector traders to be better informed and consequently be able to comply with the requirements of the country.

The Revised Kyoto Convention's General Annex contains the international standards necessary for the establishment of a Coordinated Border Management.

Standard setting is also not a field that is unique to customs and the WCO. As Customs administrations work with CBRA partners, it is also important to understand the role of other standard setting organizations and the standards that are applied in CBRA operations. This issue will be further addressed in Chapter 6.

CHAPTER 2: FUNDAMENTAL CONCEPTS IN COORDINATED BORDER MANAGEMENT

2.1. The 2 Dimensions of Coordinated Border Management

Coordinated Border Management consists of 2 intrinsically linked areas, namely, the flow of information and the physical movement of goods and people. Each dimension is governed through a series of general principles. These principles shape the specific measures that are applicable for the clearance of goods, and the clearance of people at the border.

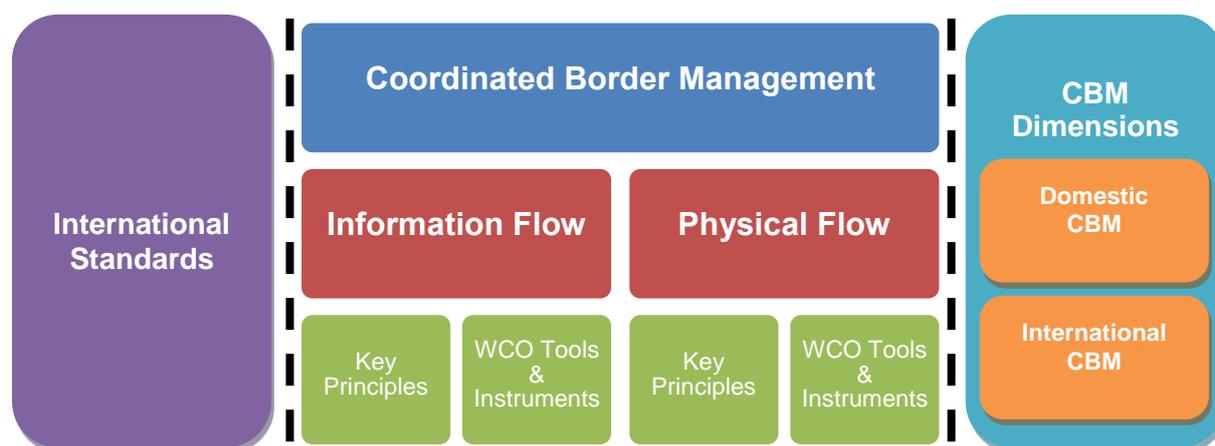


Figure 3: Coordinated Border Management Dimensions

The 2 dimensions of CBM are the foundational underpinning of a CBM system – ultimately, information, whether in paper or digital form, is required for cross-border regulatory agencies to make the necessary decision to control the flow of goods and people. The smooth flow and integrated access to high-quality information enables cross-border regulatory agencies to make the necessary decisions, in a timely fashion and without undue inconvenience to the public. This enables effective risk-management to be performed so that the physical movement of goods can be streamlined and facilitated – high-risk goods that need to be controlled will be accorded the required scrutiny and low-risk goods that can be released will not be unnecessarily hindered.

2.2. Key Principles for the Coordinated Flow of Information

The key principles for the coordinated flow of information within a CBM system is premised on the hypothesis that the availability of good information from the trade, enabled through clear requirements and efficient submission procedures, leads to improved decision making by cross-border regulatory agencies. In order for this to happen, the following principles apply:

- (i) **Regulatory Transparency:** Requirements must be transparent, so that the trading community is clear on who is providing what information, and when and how it needs to be submitted. This ensures that the regulatory authorities have the key information that it needs to process the shipment and reduces scenarios where additional information are required due to unclear requirements. The need to wait for additional information to be furnished in order for clearance decisions to be made results in inefficiencies and bottlenecks that should be avoided.

- (ii) Streamlined Submission: The means for submitting information, whether through paper forms or electronic systems, should be streamlined. Duplications in information requirements should be eliminated as far as possible (i.e. the same information should only be submitted once) and only information essential for ensuring regulatory integrity should be required. Information also does not have to be submitted all at once – this should be streamlined with the process undertaken by different agencies so that information that is essential for security and key regulatory requirements can be evaluated first, while other less critical information can be submitted within a stipulated timeframe.
- (iii) Information Sharing: To the greatest extent possible, relevant information submitted by the trading community relating to shipments crossing the border should be shared between cross-border regulatory agencies concerned so that risk management and collective decision making can take place to either control high-risk shipments, or facilitate low-risk ones.
- (iv) Information Protection: To maintain confidence between the trading community and between cross-border regulatory agencies, the confidentiality of information received and disseminated to authorised parties must be maintained. The sharing of information between cross-border regulatory agencies must be governed by clear rules and where appropriate, legal requirements, to protect the interests of the trading community and provide a legal basis for the actions of cross-border regulatory agencies.

2.3. Key Principles for the Coordinated Movement of Goods

The key principles for the coordinated movement of goods within a CBM system is premised on the hypothesis that the smooth movement of low-risk cargo across borders is essential to the key value proposition of regulatory agencies: value preservation and the effective handling of high-risk cargo leads to greater value preservation by not hindering the movement of low-risk cargo. In order for this to happen, the following principles apply:

- (i) Streamlined checks and clearance: Cross-border regulatory agencies should coordinate efforts to execute control on high-risk cargo. The procedures for conducting the checks should be clear to the trader and if a shipment needs to be inspected by multiple agencies, it should be done at the same time by all parties involved, or by a lead agency (e.g. Customs) authorised to conduct the check on behalf of another agency. The similarities and distinctiveness of the different types of controls utilized by different CBRAs should be holistically examined to ensure effective outcomes for all, and where feasible, the inspection of the goods could also be conducted at designated inland locations, instead of at the borders.
- (ii) Congestions Management: Physical infrastructures should be organized to facilitate smooth movement of goods carrying vehicles and efforts must be undertaken to identify potential sources of bottlenecks (i.e. through a Time Release Study). Cross-Border Regulatory Agencies and the trading community should work together constantly to remedy such bottlenecks.

- (iii) **Manpower Availability:** Cross-border regulatory agencies need to work with each other to ensure that manpower is available to conduct the necessary controls on targeted high-risk cargo so that waiting time is reduced. In order to make the best use of limited manpower, agencies could examine cross-training and empowering personnel from other agencies so that an agency can be tasked to undertake checks on behalf of other agencies under certain conditions, and taking steps to co-ordinate working hours, rest time and shift-change timings so that there is minimal disruption.
- (iv) **Infrastructural Availability:** Cross-border regulatory agencies should be equipped with the necessary equipment and facilities to execute control and seek positive synergies by sharing such resources with each other. In this way, Office space, parking lots, inspection bays and inspection equipment could be better utilized. Non-intrusive methods of inspection should be favoured whenever possible.

2.4. Process Innovation in CBM

The key principles outline the fundamental issues that need to be addressed when embarking on CBM. WCO tools and instruments may provide administrations with further guidance in gaining a better understanding of these issues, or allow Customs administrations to adapt them to their domestic context.

However, it should ultimately be recognized that CBM is an interactive and re-iterative process and beyond ready-made solutions and case-studies that are useful in providing guidance and inspiration, process innovation is key to achieving a sustainable, long-term CBM process that is effective in identifying issues and implementing solutions, and which is responsive to new challenges and threats.

CHAPTER 3: IMPLEMENTING COORDINATED BORDER MANAGEMENT

3.1. Organization and Structure in Coordinated Border Management

Coordinated Border Management does not come naturally – it is an engineered process, put in place by like-minded cross-border regulatory agencies both within and across borders to achieve the desired outcome of effective and efficient border control. The motivation behind CBM can be internally or externally motivated.

External motivations include:

- Implementing bilateral or multilateral agreements including:
 - Mutual Assistance Agreements
 - Mutual Recognition of AEO
 - Free Trade Agreements
 - Regional Integration Agreements
 - Multilateral Trade Agreements

Internal motivations include:

- Enhancing national competitiveness
- Construction of new infrastructures like border posts, sea ports or airports
- Addressing security threats and regulatory challenges
- Improving service quality

Both internal and external motivations are valid reasons for undertaking CBM and many situations may result due to a combination of both internal and external motivations. The need to implement legal agreements often provides some legal basis and obligations on the part of signing countries and may even provide the specific scope of the type of CBM required.

At the more basic level, Customs Mutual Assistance Agreements and AEO Mutual Recognition would primarily involve the Customs administrations of both countries but more complex arrangements such as Free Trade Agreements, for example, would typically oblige parties to offer facilitated procedures and preferential tariff rates to each other on the basis of specific origin rules. This requires harmonization in the recognition of goods from preferential partners through certificates of origin, databases of registered manufacturers as well as validation and communication mechanisms in case of doubt. It may also oblige trading partners to exchange data for statistical or trade compliance purposes, and provide assistance to each other to investigate suspicious shipments relating to the free trade agreement.

More far ranging agreements that involve both Customs controls and CBRA regulations would necessitate the formation of formal working mechanisms both domestically, as well as bilaterally or multilaterally to ensure that such provisions could be implemented. The situation is further complicated when addressing Regional Integration Agreements and Multilateral Trade Agreements (such as the WTO Trade Facilitation Agreement), where the provisions are far reaching and cross-cutting to the extent that it is not possible for any 1 party or agency to implement all provisions without collaboration from others.

Internal motivations can provide a similarly compelling impetus. The need to enhance national competitiveness through greater harmonization, simplification and facilitation for trade is, in itself, a compelling motivation. The construction of new infrastructures would typically bring together Customs, CBRAs and other parties as well, so that the requirements of the respective parties could be deliberated and coordinated. Addressing multi-faceted security threats and regulatory challenges that requires collaboration between Customs and CBRA is similarly compelling.

The intrinsic similarity between these motivations lies with the fact that in both cases, Customs and CBRAs are mobilized through the exercise of political will by higher institutional authorities such as ministries, as well as the personal motivation of ministers and state executives. Political will provides the essential enabler for Customs and CBRAs to act on the internal and external motivations, and translate them into improvements in border management.

Organization is essential. Without an effective organization structure, discussions and priority setting can become haphazard and actions undertaken will be ineffective. In this regard, the implementation of Coordinated Border Management can be characterized through the typical PDCA process shown below.

This re-iterative process is intended to bring together like-minded parties, identify improvements, implement them in a systematic way and sustain the changes over the long-term so that maximum benefits can be generated.

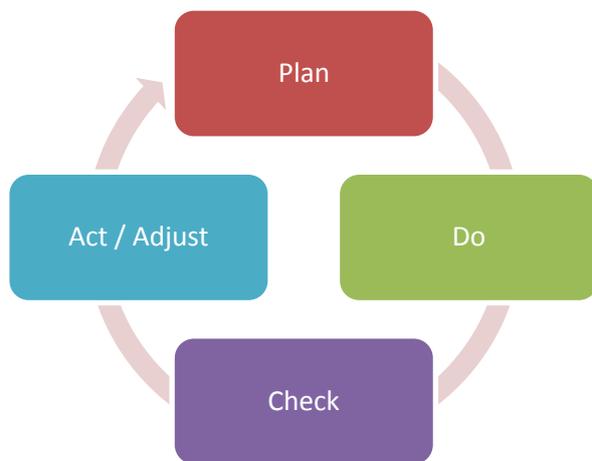


Fig 4: ISO Plan-Do-Check-Act (PDCA) Cycle

The PDCA cycle is a generic iterative 4-step management method for continual improvements of processes and products and can be applied to CBM as follows:

3.2. The “Planning” Phase

Key activities that need to take place in the “planning” phase include:

3.2.1. Deciding on the steering structure for CBM

Effective organization is key to CBM and a formal structure must be established to facilitate the planning and decision making process. This structure should include a Steering Committee whose main purpose would be strategic level decision making and coordination.

The Steering Committee should establish clear agency and personal leadership through the appointment of a senior official of the lead ministry or agency as the chair of the committee, and should also include senior members of collaborating ministries and CBRAs, as well as members of the trading community so that key decisions can be made in consultation with essential stakeholders.

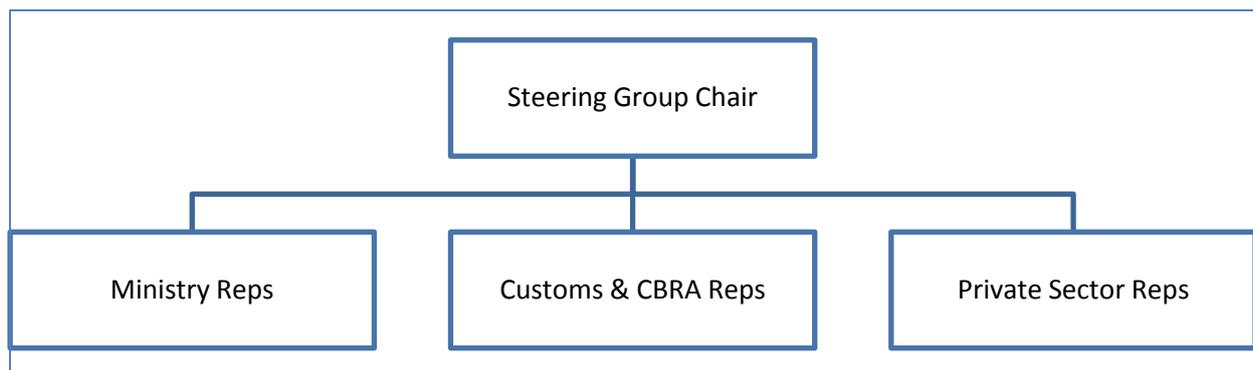


Fig 5: Example of CBM Steering Committee Structure

In the event of a cross-border CBM group, the structure for the Steering Committee would remain fundamentally the same, except that the appointment of the Chair (and where appropriate, vice-chairs) would have to be agreed upon by the various parties involved so that the Steering Committee is able to exercise clear leadership and decision-making powers.

The size of the Steering Committee would also have to be expanded to include members from participating countries.

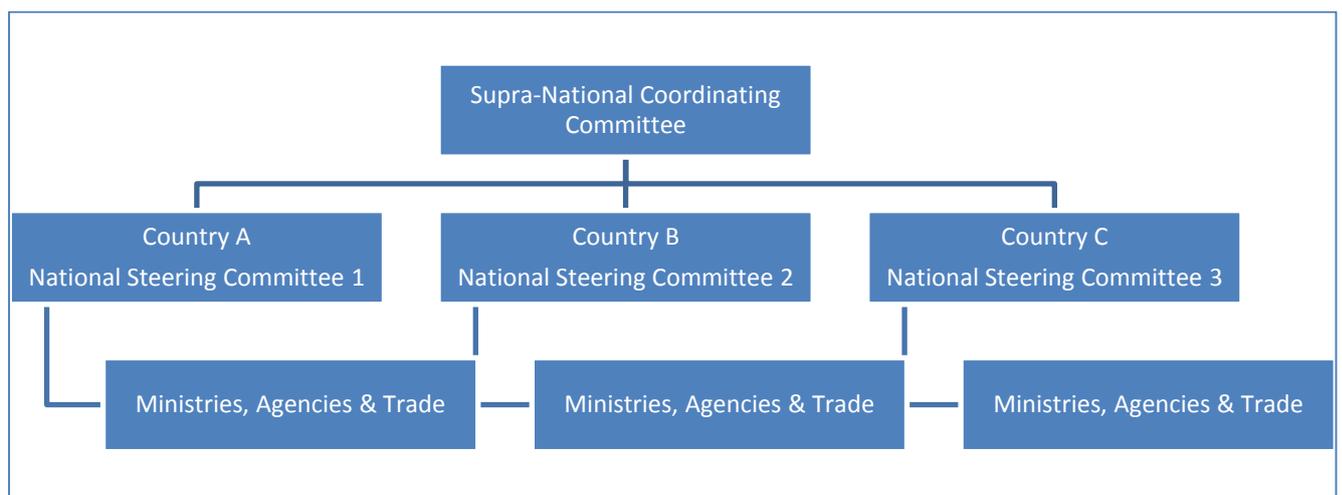


Fig 6: Example of supra-national coordinating structure

Alternatively, a Coordinating Committee Structure could also be considered, so that each National Steering Committee is able to retain a diverse pool of members domestically, but

with a supra-national Coordinating Body consisting of the head of each National Steering Committee, providing the leadership and coordination role.

3.2.2. Deciding on the working structure of CBM

The Steering Committee and Supra-national Coordinating Committee structure is intended to enhance the effectiveness of strategy development and high level decision making in CBM. They are typically also supported by working-level groups that consist of technical experts in the various fields.

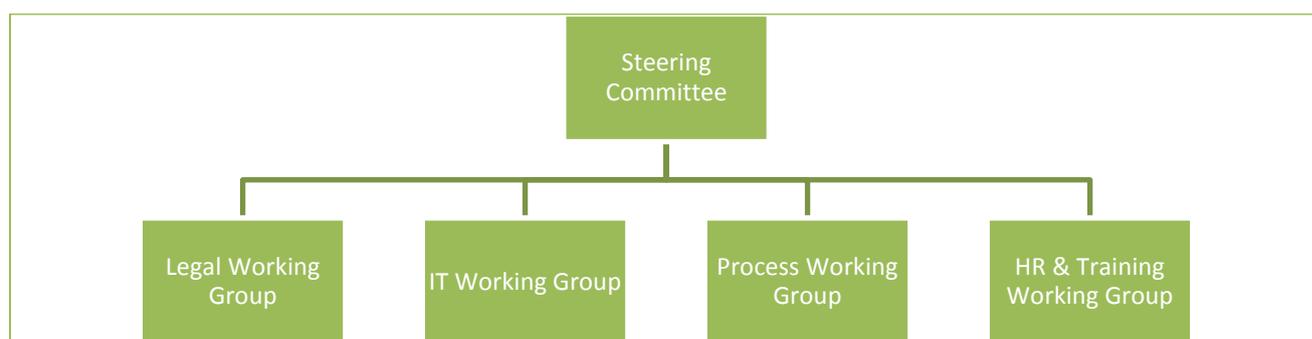


Fig 7: Example of CBM Working Group Structure

Essential fields that are important in CBM and which should be considered as part of working group structures include:

- Legal Basis of CBM: For Customs and CBRAs on the ground to identify the various legal enablers that provide for enhanced CBM, or legal gaps that prevents effective CBM.
- Information Technology: To identify areas where data harmonization can lead to greater simplifications for government and trade, and where greater system interoperability can lead to more efficient systems and greater alignment with the physical flow of goods.
- Processes: To map existing border processes so that bottlenecks and inefficiencies can be identified and resolved.
- Human resources & training: To identify current state of competencies among participating agencies to identify capacity gaps and new skills needed.

The work of the various working groups are often interactive – IT and processes need to be grounded in the legal basis while HR and training need to be based on an adequate understanding of systems and processes, and whether new capabilities are needed to support future changes. Hence, these Working Groups will also need to engage with each other regularly, both in the course of their work, as well as through the Steering Committee.

3.2.3. Establishing secretariat support

Both the Steering and Working Structure will require support to ensure that the work is done in an orderly fashion, with proper documentation and administrative support. The existence of secretariat support can enhance the effectiveness of the respective committees, by freeing up time devoted to administrative tasks, such as the planning of meeting dates, ensuring the availability of meeting venues, coordinating the availability of participants and preparation of meeting agendas and documents. In the event that resource constraints do

not allow for the establishment of separate secretariat bodies for both the steering and working bodies, priority should be given to the steering body to be supported by a secretariat body while the working bodies could establish an informal secretariat with existing members taking turns to perform secretariat functions, or rotating the function between participating government agencies.

3.2.4. Budget and resource planning

The formation of CBM steering and working structures constitutes a cost, both in terms of monetary resources, as well as man-hours and opportunity costs. Personnel assigned with responsibilities in the Steering and Working Committees cannot be expected to undertake both their committee work and their day-to-day workload effortlessly without sacrificing one or the other. Hence, recalibration of resources to place CBM on a higher priority is necessary for success.

At the same time, the CBM projects themselves will require monetary resources to carry out – improvements to infrastructures and systems and training budgets will need to be planned in a fiscally responsible way so that CBM programs will become a value-adding investment, and not a resource drain.

This requires coordination among participating agencies to provide the necessary projections and forecasts to request for budget to be made available, or engagement with donors and development partners to fund specific CBM projects.

3.2.5. Determining the composition of personnel within the CBM steering and working structure

All border agencies and those Ministries responsible for policy matters concerning border operations should be included in CBM. The actual composition may differ from country to country, but consideration should be given to including representation from Ministries and organizations such as Customs, Border Guards, Police, Ministry of Finance, Ministry of Economy, Ministry of National Defence, Ministry of Environment, Ministry of Foreign Affairs, Ministry of Agriculture, Ministry of Transport, Ministry of Health, Ministry of Telecommunications, and industry and business groups and associations. In this way, the respective working groups dedicated to studying and implementing the various aspects of CBM can draw on expertise from different parties.

3.2.6. Formalizing the terms of reference for CBM bodies

The terms of reference for all CBM bodies need to be defined and formalized to provide the necessary empowerment and to ensure that they remain focused on their task. In case of overlapping topics, the Working Groups should, themselves engage with one another to establish the necessary consensus on how to proceed or to escalate to the Steering Committee in cases of doubt so that it can provide the necessary guidance on which working group should undertake action on the topic, or to direct 2 or more working groups to work together.

The establishment of clear terms of reference and reporting channels is also necessary for good governance and transparency. This is important to prevent conflicts of interests and irregularities which increase confidence among the various participants.

3.2.7. Developing the scope and intended outcomes for the first phase of activities

The planning phase should also aim to define the scope, intended outcomes and performance measurements for the first phase of activities, based on resource availability and strategic needs. CBM needs to be grounded in realism. It will not be possible to do everything all at once. Therefore, the focus should be on ensuring that the newly established structure was adequate, the goals are achievable and the continual improvement trajectory are sustainable in the long term.

It is necessary to strike a balance between improvements that can be achieved in the short-term and longer-term stretch-goals that require more time to achieve.

3.3. The “Doing” or “Execution” Phase

While the “planning” phase aims to provide the necessary foundation for the CBM structures to take effect, the “doing” or “execution” phase would aim to put the planning into action. Depending on the scope and intended outcomes defined during the planning phase, key activities that typically take place in the doing phase may include:

3.3.1. Establishing the Context:

The respective working bodies should undertake fact-finding to detail and document the existing context. This could be done through environmental scans, a Time-Release Study and process mapping exercise to determine the parties involved in the import / export regulatory process, the amount of time it takes, and the data elements and laws involved.

Another useful tool that could be deployed for structured fact-finding is the WCO Single Window Functional Assessment Template. The template, typically used for single window planning purposes, is just as useful for CBM in allowing for detailed information to be captured so that subsequent process analysis and re-engineering can take place.

Once the necessary fact-finding had taken place, the respective Working Groups should proceed to analyze the information and identify actionable gaps.

3.3.2. Evaluating the options

Due to the complex nature of CBM, not everything can be done at the same time due to the lack of time, lack of resources or other constraints that prevents action on certain issues. The respective Working Groups should evaluate the various issues identified and make appropriate recommendations to the Steering Committee for its decision.

It should always be remembered that CBM is not a one-off affair and the first set of recommendations merely sets the stage for future improvements to take place. Approval of the course of action for the identified priority areas by the Steering Committee also provide the necessary assurance that key government and private sector stakeholders had been consulted and agree with the issues identified and the action plans proposed.

3.3.3. Project Planning

Depending on the level of complexity of the CBM project involved, varying levels of project planning need to be undertaken. Basic arrangements that involve simple re-calibration of

existing arrangements such as coordinating working hours and making existing manpower available during peak-hours identified can be executed with relatively straightforward planning. More complicated changes that involve changes in IT systems and work procedures may require more extensive planning where procurement planning, IT project management, training and extensive communication to inform the trade of impending changes are required. The Working Committees concerned will play an important part in this planning, in collaboration with Customs and CBRA elements on the ground so that sufficient preparations are undertaken for the projects to be successfully executed.

3.3.4. Implementing the changes

The approved action plans should now be communicated to the parties concerned and executed. This will involve budget and resource allocation that includes the re-deployment of personnel and equipment and the procurement of additional equipment, construction of new facilities and development of new IT systems. It may also be necessary to make recommendations on legislative amendments to provide the legal basis for CBM so that streamlined processes can be implemented.

The work of the Steering Committee and Working Groups continue to be of central importance as the execution phase will typically involve coordination between operational units at the border, as well as policy-makers at the Ministry level. The CBM organizational structure serves as the coordinating party to monitor, steer and report on ongoing developments to ensure proper governance for the programmes being implemented. This would also include the need to collect data for key performance indicators and other measurements that had been defined to ensure that implementation led to improvements on the ground.

3.4. The Checking Phase

The “checking” phase reinforces the doing or execution phase by inspecting the results from the execution against the original plans to ensure conformance and quality implementation. In the CBM context, it refers to the extent in which the results on the ground have improved after the implementation of the specific action plans.

3.4.1. Conducting post-Implementation reviews

CBM is not a single undertaking. It typically consists of multiple projects of varying sizes and complexity implemented over time that contributes to a strategic outcome. In assessing the effectiveness of the individual projects implemented, it is necessary to determine:

- (i) Whether the project management was effective
- (ii) Whether the planned project was successfully implemented
- (iii) Whether the successful implementation of the project led to the anticipated improvements and achieved the targets that had been set

These conclusions are essential for ensuring that the experiences gained through the implementation of the projects are distilled and documented for future reference, so that future projects will not make the same mistakes, and things that work continue to be applied and improved upon.

Successful implementation of a project also should not be taken as an outcome in itself – CBM needs to achieve positive results and lead to tangible improvements on the ground. Such results should be identified beforehand and be measurable so that it gives confidence to the implementers that the effort had borne fruit. Conversely, projects that had not resulted in tangible improvements should be critically analyzed so that the root cause of the problem was identified and further improvements can be made.

3.4.2. Reporting of Results

This typically involves the collection of qualitative and quantitative measures that had been identified during the “planning” and “doing” or “execution” phase, such as customer satisfaction measures, time savings for new procedures, time savings arising from improved flow of goods and reduction in the number of duplicated data elements.

Result-reporting is an important source of legitimacy for CBM bodies. The achievement of positive results enhances confidence and reduces resistance to change when stakeholders perceive the improvements made and benefit from them.

The “checking” Phase is important for checking the validity of assumptions made during the planning phase by ensuring that solutions implemented targeted the root cause of the problems. For example, traffic jams at a border post could be caused due to the lack of collaboration between government agencies, or more fundamentally, due to the lack of physical infrastructures, such as narrow roads and poorly designed traffic flow. If CBM had not led to the anticipated level of improvements because the flow of traffic remained un-optimized, the next stage of improvements should focus on traffic flow.

3.5. The Act / Adjust Phase

The “act / adjust” phase serves to provide corrective actions to bring about the next level of improvements. Not everything can be addressed at the same time. Hence, after the first round of issues had been implemented, the gaps between planned and actual results need to be studied so that new action items can be uncovered and previous issues omitted can be re-considered.

This allows for the CBM Organization Structure to enter into its next iteration, where additional stakeholder agencies could be included, terms of references refined, working processes improved and the operation of the individual sub-groups refined.

3.6. Implementation Maturity in CBM

The PDCA Cycle provides a generic model for putting together a CBM organizational structure by incorporating expertise from different CBRAs into a steering and working structure and the reiterative approach needed for continual improvements. As a CBM working structure grows and matures, it will be possible to instil greater levels of sophistication and depth into the working structure, so that higher-order priorities can emerge when the “low-hanging fruits” had been harvested.

Such efforts are necessary to instil continual improvements, foster innovation and bring about even greater levels of customer and stakeholder satisfaction. Examples of such areas include:

- Horizon Scanning and Strategic Planning
- Human Capital Development
- Customer Focus
- Improvements in Key Result Areas

3.6.1. Horizon Scanning & Strategic Planning

In 2008, the WCO published the “Customs in the 21st Century” document which identified, among other things, the challenge faced by Customs in operating in a rapidly evolving environment, with increasing trade volumes, new business models and security threats and organized crime putting pressure on Customs to increase its capabilities. Better coordinated border management was identified as one of the building blocks for the new strategic direction and the pursuit of CBM necessitates Customs and CBRAs to invest in capabilities to support CBM through active research and analysis to identify issues before they escalate into serious challenges that threaten national competitiveness and regulatory compliance.

Generic tools, such as SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis and PEST (Political, Economic, Social, Technological) Analysis provide a ready-made knowledge base to guide administrations in this effort. Such scanning exercises should be done regularly so that Customs and CBRAs are able to identify cross-cutting issues in a timely manner and formulate effective and coordinated responses to them.

The role of strategic planning in this process cannot be under-estimated. Strategic planning, already an activity that is complicated to undertake in a single agency, compounds in complications when different agencies need to plan for, and coordinate activities at both the operational level, as well as the strategic level. The CBM Steering Committee highlighted above will often have to take an active role in this effort, so as to foster strategic alignment between different government agencies and to take coordinated decisions to tackle cross-cutting issues.

3.6.2. Human Capital Development

Well-designed processes remain dependent on well-trained and well motivated staff to deliver positive results. In the earlier stages of a CBM working structure’s existence, it may encounter resistance on the ground due to misunderstandings, defensiveness and reluctance on the part of different agencies to work together due to the perception that CBM may adversely affect their respective agency’s interests. The need for effective communication and engagement to mitigate such tendencies would be one of the issues that countries would have to address when embarking on CBM.

Subsequent focus may then shift towards the need for new training to raise awareness between Customs and CBRAs of each others’ work areas, or even cross-training to enable an agency to undertake the responsibility of another agency’s work in straightforward cases. Greater maturity in the CBM structure may even uncover new competencies and common training areas among different agencies that could be met together.

To ensure alignment between high-level strategy and ground action, the ground staff would also need to be made aware of the common strategic purpose behind their work, and understand how all agencies are dependent on each other to deliver the best possible outcomes to enhance the economic competitiveness of the country.

3.6.3. Customer Focus

The ability to put aside diverse agency interests and come together to achieve a common good needs to be rooted in the recognition that no single agency is able to perform its work in an isolated manner. The trading community and general public also expect government agencies to deliver services in an effective, efficient and coordinated manner.

The CBM Steering Committee will, once again be an important body to establish service standards and targets for Customs and CBRAs to work towards. Better information management, particularly in the processing of customer feedback and complaints, may also uncover opportunities to improve existing processes and services.

3.6.4. Improvements in Key Result Areas

The viability of any CBM effort ultimately hinges on the ability of the parties involved to demonstrate tangible improvements through both qualitative and quantitative measures. Tools such as the Time Release Study provide the methodology to quantitatively measure improvements in the border clearance process and the processing time for electronic declarations provide another important indicator for electronic processing systems or single-window environments.

Improvements in customer satisfaction, determined through a customer satisfaction survey, as well as the reduction in the number of complaints or an increase in the number of compliments received provide qualitative measures to enable the Customs and CBRAs to gauge if their efforts had been successful in improving border processes.

3.7. Continual Improvements and Sustainability

The implementation of CBM necessitates the establishment of formal structures that involves key stakeholders including Customs, CBRAs and the trading community. The composition, size and specific functioning of these structures will depend on the specific local conditions and priorities.

Nevertheless, it should be recognized that while flexibility should be exercised to take into account local conditions and priorities, the principles of effective organization to enable continual improvements would be applicable in all conditions.

It should always be remembered that CBM is not a one-time affair, but a continual improvement process. The basic PDCA cycle provides the basic concept to establish a generic CBM organizational structure and total quality management concepts provide the basis for future maturity, so that CBM will become entrenched into a country's border management processes and provide the firm foundation necessary to support national competitiveness and growth.

CHAPTER 4: THE REVISED KYOTO CONVENTION AND COORDINATED BORDER MANAGEMENT

4.1. The Revised Kyoto Convention and CBM

The Revised Kyoto Convention (RKC) is an international Convention that provides a set of comprehensive Customs tools to facilitate legitimate international trade while effecting Customs controls including protection of Customs revenue and society.

It elaborates key principles of simplified and harmonized Customs procedures such as:

- Predictability.
- Transparency.
- Use of information technology.
- Use of modern Customs techniques:
 - Risk management.
 - Pre-arrival information.
 - Post-clearance audit, etc.

4.2. Standards relating to Clearance and other Customs Formalities.

Chapter 3 of the General Annex of the RKC provides standards that, when implemented, provide the template for efficient border post processes.

For instance, Standard 3.1 states:

“The Customs shall designate the Customs offices at which goods may be produced or cleared. In determining the competence and location of these offices and their hours of business, the factors to be taken into account shall include in particular the requirements of the trade.”

In discussing CBM, it would be impossible to regard “Customs Offices” as referring to Customs only. The designation of competency and location **in accordance with the requirements of trade** demands a holistic approach involving both Customs, as well as relevant Cross Border Regulatory Agencies so that goods regulated by CBRAs can also be processed.

Standard 3.11 raises an additional dimension to the need to take a holistic approach:

“The contents of the Goods declaration shall be prescribed by the Customs. The paper format of the Goods declaration shall conform to the UN-layout key.

For automated Customs clearance processes, the format of the electronically lodged Goods declaration shall be based on international standards for electronic information exchange as prescribed in the Customs Co-operation Council Recommendations on information technology.”

As Customs is typically the major agency dealing with imported goods at the border, it is often required to obtain information relating to other matters, such as the compilation of trade statistics, banking or exchange control requirements, as well as CBRA requirements. Conformance to the UN Layout key ensures a level of harmonization between Customs and

CBRAs, as well as between Customs administrations across different countries. The use of the UN layout key had also led to the development of the Single Goods Declaration (SGD), which appears in the Recommendation of the Customs Co-operation Council (WCO) of 26 June 1990 and is included in Appendix II.

A Goods declaration similar to the SGD and known as the Single Administrative Document (SAD) was introduced in 1988 by the European Community to be used in the countries of the European Union for all import, export and transit procedures. The SAD format is widely applied amongst Customs administrations. It is also used by the countries which have applied for membership of the European Union and by the countries of the European Free Trade Association. In addition, a modified version of the SAD is used by countries which have implemented UNCTAD's ASYCUDA Customs automation system.

The concept of combining information required by Customs with data required by other governmental agencies, which is an important advantage of the SAD, can give useful support to the co-ordination of official controls provided for in Transitional Standard 3.35, which states that:

“If the goods must be inspected by other competent authorities and the Customs also schedules an examination, the Customs shall ensure that the inspections are co-ordinated and, if possible, carried out at the same time.”

Where collaboration involves neighbouring Customs administrations, Standard 3.3 as well as Transitional Standard 3.4 and 3.5 further elaborates on operations of common border crossing and juxtaposed Customs offices in requiring Contracting parties to correlate operating hours and competences, establishing joint controls and establishing or converting existing facilities into juxtaposed customs offices:

3.3. Standard

“Where Customs offices are located at a common border crossing, the Customs administrations concerned shall correlate the business hours and the competence of those offices.”

3.4. Transitional Standard

“At common border crossings, the Customs administrations concerned shall, whenever possible, operate joint controls.”

3.5. Transitional Standard

“Where the Customs intend to establish a new Customs office or to convert an existing one at a common border crossing, they shall, wherever possible, co-operate with the neighbouring Customs to establish a juxtaposed Customs office to facilitate joint controls.”

These standards provides essential guidance to Contracting Parties in achieving greater harmonization and efficiency in their border processes, both in exploring domestic CBM, as well as cross-border CBM with neighbouring countries.

4.3. Standards relating to Customs Control

Chapter 6 of the RKC deals with Customs Control, with particular emphasis on the use of risk management and audit-based controls.

The use of risk management to determine objective selectivity criteria in regulatory control is essential for the effective deployment of resources. With the exponential increase in trading volumes all over the world, it is too costly and too inefficient to scrutinize every instance of import and export without distinction. The effective use of risk management enables Customs to facilitate low-risk shipments while focusing its efforts on the higher risk areas.

The relevant standards states:

6.3. Standard

“In the application of Customs control, the Customs shall use risk management.”

6.4. Standard

“The Customs shall use risk analysis to determine which persons and which goods, including means of transport, should be examined and the extent of the examination.”

6.5. Standard

“The Customs shall adopt a compliance measurement strategy to support risk management.”

6.9. Transitional Standard

“The Customs shall use information technology and electronic commerce to the greatest possible extent to enhance Customs control.”

The effective deployment of risk management is directly dependent on the availability of information on the goods. The use of electronic systems to facilitate the submission of pre-arrival declarations makes it possible for Customs to assign pre-arrival decisions on the basis of the declarations received. As Customs, in many cases, is also collecting information on behalf of other CBRAs, it enhances the ability of Customs to work with other CBRAs on joint inspections and joint controls.

The issue of joint risk management between Customs and CBRAs will be further explored in the next chapter.

Chapter 6 of the RKC also deals with the need to establish formal agreements with foreign Customs administrations and the trade to enhance Customs Control. The relevant standards states:

6.7. Standard

“The Customs shall seek to co-operate with other Customs administrations and seek to conclude mutual administrative assistance agreements to enhance Customs control.”

6.8. Standard

“The Customs shall seek to co-operate with the trade and seek to conclude Memoranda of Understanding to enhance Customs control.”

Chapter 1 of this compendium had addressed the need for formal arrangements, to provide a legal basis, as well as to ensure good governance and sustainability. Collaboration with the trading community is also essential for identifying legitimate economic entities that are

compliant and can be facilitated, in addition to being able to provide Customs with important feedback and assist Customs in enhancing controls.

4.4. Application of Information Technology

Chapter 7 of the RKC addresses the Application of Information Technology (IT). The increasingly common use of information technology in border regulatory work had brought about increased efficiency. Electronic data and systems can be used to accomplish functions and achieve capabilities that were previously unheard of, provided it was used effectively. The relevant standards provide insights on the proper use of information technology to achieve the maximum effect:

7.2. Standard

“When introducing computer applications, the Customs shall use relevant internationally accepted standards.”

7.3. Standard

“The introduction of information technology shall be carried out in consultation with all relevant parties directly affected, to the greatest extent possible.”

7.4. Standard

“New or revised national legislation shall provide for:

- *electronic commerce methods as an alternative to paper-based documentary requirements;*
- *electronic as well as paper-based authentication methods;*
- *the right of the Customs to retain information for their own use and, as appropriate, to exchange such information with other Customs administrations and all other legally approved parties by means of electronic commerce techniques.”*

As standards 7.2, 7.3 and 7.4 state, the introduction of IT systems needs to be based on international standards and be communicated to all relevant parties to the greatest extent possible to ensure **inter-operability**.

The measure of an IT system’s effectiveness lies in its ability to bring about better communication between relevant parties and better ways of doing things. Hence, an IT system developed for border clearance must consider the diverse government and non-government stakeholders at the border, and their interactions with each other and add value to both private and public sector stakeholders. The use of IT and the electronic Single Window will be discussed in subsequent chapters.

4.5. The Bali Package

The WTO Bali Ministerial Declaration and ministerial decisions were adopted on 7 December, 2013, after intensive negotiations amongst WTO members and was described as the first major agreement among WTO members since it was formed in 1995. The most significant part of the package that related to global commerce is the Agreement on Trade Facilitation (TFA), which brings border processes into sharp focus.

Its stated objectives are:

- To speed up customs procedures;

- To make trade easier, faster and cheaper;
- To provide clarity, efficiency and transparency;
- To reduce bureaucracy and corruption;
- To make of technological advances.

In addition to the trade-focused provisions, the Agreement on Trade Facilitation also includes provisions for assistance to developing and least developed countries to update their infrastructure, train customs officials, or for any other costs associated with implementing the agreement.

4.6. Similarities between RKC and TFA

A comparison between the relevant TFA and RKC standards are shown in the table below:

Agreement on Trade Facilitation	Revised Kyoto Convention
<p>Article 7 Release & Clearance of Goods</p> <p>4.1.1. Each Member shall, to the extent possible, adopt or maintain a risk management system for customs control.</p> <p>4.1.2. Each Member shall design and apply risk management in a manner as to avoid arbitrary or unjustifiable discrimination, or disguised restrictions to international trade.</p> <p>4.1.3. Each Member shall concentrate customs control and, to the extent possible other relevant border controls, on high risk consignments and expedite the release of low risk consignments.</p>	<p>Standards 6.3 Standards 6.4 Standards 6.5</p>
<p>Article 8 Border Agency Cooperation</p> <p>8.1. A Member shall ensure that its authorities and agencies responsible for border controls and procedures dealing with the importation, exportation and transit of goods cooperate with one another and coordinate their activities in order to facilitate trade.</p>	<p>Transitional Standard 3.35</p>
<p>8.2. Members shall, to the extent possible and practicable, cooperate on mutually agreed terms with other Members with whom they share a common border with a view to coordinating procedures at border crossings to facilitate cross-border trade. Such cooperation and coordination may include:</p> <ul style="list-style-type: none"> (i) alignment of working days and hours; (ii) alignment of procedures and formalities; (iii) development and sharing of common facilities; (iv) joint controls; (v) establishment of one stop border post control. 	<p>Standard 3.1 Standard 3.3 Standard 3.4</p>

<p>Article 10 Formalities Connected with Importation and Exportation and Transit</p> <p>10.3.1 Members are encouraged to use relevant international standards or parts thereof as a basis for their importation, exportation or transit formalities and procedures except as otherwise provided for in this Agreement.</p> <p>4.1. Members shall endeavour to establish or maintain a single window, enabling traders to submit documentation and/or data requirements for importation, exportation or transit of goods through a single entry point to the participating authorities or agencies. After the examination by the participating authorities or agencies of the documentation and/or data, the results shall be notified to the applicants through the single window in a timely manner.</p>	<p>Standard 7.2 Standard 7.3*</p> <p>(*RKC Standard 7.3 does not mention the single window directly – it simply states that IT system developments “shall be carried out in consultation with all relevant parties directly affected”. The intended outcome of this standard is to ensure maximum collaboration and inter-operability between the parties of different systems, as well as alignment with existing work processes – both of which are essential to SW development.)</p>
--	---

The alignment between the RKC and the TFA are not limited to the table shown above. Due to the customs-focused nature of the agreement, many of the provisions have their equivalence in the RKC, or other WCO tools, instruments and guidelines.

This alignment enables the RKC to serve as an important foundation in preparing for TFA implementation.

CHAPTER 5: WCO INSTRUMENTS & TOOLS FOR CBM

5.1. Application of WCO Tools & Instruments in CBM

The concept of Coordinated Border Management is embedded within various WCO tools and instruments that aim to support Customs Administrations to perform their tasks more effectively and efficiently. To elaborate on the issues raised under Chapter 1, where the issue of the alignment of vision for CBM was mentioned, each WCO tool and instrument can be seen as the means to give effect to that vision and CBM may be perceived as the effective utilization of such international standards (such as the RKC), tools, instruments and guidelines to achieve the most effective and efficient ways to regulate border traffic. By adopting international standards, Administrations benefit from the large body of knowledge and experts that had gone behind the development of these standards, and acquire additional assurance that their procedures would be harmonized and in line with international norms.

However, standards alone are often insufficient to do the job. Standards typically only provide the high-level statement of intent, or intended outcomes. More practical guidance is often necessary to implement the necessary programs to give effect to the standards.

As shown in Chapter 3, the standards relating to CBM in both the RKC, as well as the TFA involve 3 key areas:

- Coordination of procedures and formalities;
- Coordination of enforcement and controls;
- Coordination in information technology developments.

Each area is mutually reinforcing, but each requires different tactical activities to achieve. Substantive achievement in each area further supports the country in achieving the overall vision of CBM, namely, value preservation for trade as well as economic and public wellbeing.

5.2. WCO Tools Relating to Coordination of Procedures & Formalities

5.2.1. The Time Release Study

Before any coordination of procedures and formality can take place, it is important for Customs and CBRAs to have an objective understanding of the current-state. This is an important basis for subsequent reform and changes and is very useful for measuring the effectiveness of measures that were put in place.

An essential WCO tool for this purpose is the **Time Release Study (TRS)**. The TRS measures relevant aspects of the effectiveness of operational procedures that are carried out by Customs and other regulatory actors in the standard processing of imports, exports and in transit movements. The tool allows administrations to identify bottlenecks in the clearance process so that both policy makers and ground operators can develop an objective understanding of the border situation and formulate improvement decisions.

The TRS study can be applied to serve different goals and objectives, including:

- **Macro-Economic Approach** - To **measure** the arithmetic mean and/or median time between the arrival of the goods and their release into the economy;

- **Strategic Planning Approach** - To **estimate** with some precision, based on the standardized system, the time required for each intervening event between arrival and release of the goods, i.e. unloading, storage, presenting the declaration, inspection, release, removal of goods, intervention by other services, etc;
- **Management Approach** - To **inform** the administration's officials in a precise manner, with proper statistical methods, of the time required for Customs release of goods;
- **CBM Approach** - To **identify** the constraints affecting Customs release, such as granting of authorizations or permits, application of other laws, inspections by other services, etc, consider possible corrective actions, if necessary in co-operation with other parties, and select solutions;
- **Modernization Approach** - To **compare** the results obtained in this study by means of the standardized system with previous studies, especially when introducing changes in Customs or border procedures under modernization, reform or trade facilitation programmes;
- **Customs to Business Partnership Approach** - To **undertake** TRS with Business to find bottlenecks in border procedures in order to discuss reasons for delays caused by Customs, other border agencies and/or the private sector, and where necessary to formulate an action plan for improvement; and
- **Customs to Customs Partnership Approach** - To **collaborate** with neighboring countries and with other countries with/or in a Customs/Economic Union on TRS, so as to identify bottlenecks in a common border crossing or in a supply chain from export to import and take necessary solutions.

The key value of the TRS lies in its ability to provide objective and measurable data to inform decision making and determine the relative effectiveness of changes that were implemented at the border. It pin-points bottlenecks and makes clear who are the parties that need to be involved so that the situation can be improved.

While having access to hard facts and objective measurements can enable Customs and CBRAs to focus on the key bottlenecks, it should always be remembered that the whole process needs to be non-judgemental and guided by a spirit of constructive collaboration. Every effort should be made to avoid “finger-pointing” as this can trigger defensiveness on the part of partner government agencies and damage rapport and confidence between parties involved!

5.2.2. The SAFE Framework of Standards (SAFE FoS)

In addition to the specific time required for each step in the process that can be measured through the TRS, it is also necessary for Customs and CBRAs to develop programs and procedures that allows for regulatory processes to be aligned to logistics and supply chain processes to enhance the ease and cost of compliance. The **WCO Integrated Supply Chain Management Guidelines** provides guidance on how Customs can achieve end-to-end control of the supply chain by working with the private sector to acquire the information necessary to make security risk assessments, and with foreign Customs administrations to

share information that allows them to manage risks and ensure the integrity of shipments across the entire supply chain.

The SAFE FoS also provides standards to guide Customs in working together with foreign counterparts, the private sector, and other government agencies in ensuring the security of the supply chain.

The SAFE FoS rests on 2 pillars: Customs-to-Customs network arrangements, and Customs-to-Business Partnerships. Coordinated Border Management is also mentioned in the SAFE FoS, in the context of developing co-operative arrangements among CBRAs that are involved in international trade and security, as well as collaboration with the CBRAs of foreign governments in order to maximize the harmonization of border procedures.

Trade recovery and resumption after a disruptive incident is also identified as a key area where CBM would be crucial. In the absence of pre-arranged mechanisms and plans identifying the specific roles and responsibilities of each government agency, and the general consensus of each agency partner, countries may incur a much higher cost, in terms of lost trade, delays and eroded national competitiveness, as well as preventing the entry of goods that may be crucial to national response to the incident, including relief supplies and essential goods.

5.2.3. Safe FOS Pillar 1: Customs to Customs

The Customs-to-Customs Pillar contains standards that support Customs in developing effective mechanisms for securing the international trade supply chain, particularly through the use of advance electronic information and risk management to identify high-risk cargo, the automated exchange of information using harmonized messages and interoperable systems, and the use of non-intrusive inspection equipment for the inspection of goods.

On the domestic front, it should be recognized that the security of the supply chain is not limited to Customs. Customs needs to work in collaboration with law enforcement agencies and other security agencies to ensure that border processes are well coordinated, so that information that is needed is available to all parties, whether in part or in full, and where controls need to be conducted, it is done in a coordinated fashion.

As mentioned in Chapter 1, CBM is a response towards resource scarcity – the use of non-intrusive inspection (NII) equipment is preferred because it takes less time. But the value of NII equipment would be further enhanced if its use could be shared among CBRAs. The use of advance electronic information also needs to be considered as part of the broader question of the total information requirements necessary to regulate and facilitate trade, so that information requirements are not duplicative and burdensome.

On the international front, the network arrangements for the exchange of timely and accurate information will enable Customs administrations to manage risk more effectively. Not only will this improve the ability of Customs to detect high-risk consignments, it will also enable Customs administrations to improve their controls along the international trade supply chain and make for better and more efficient allocation of Customs resources. The Customs-to-Customs network arrangements will strengthen co-operation between Customs administrations and enable administrations to carry out controls earlier in the supply chain, e.g. where the administration of an importing country requests the administration of the exporting country to undertake an examination on its behalf. The SAFE Framework also

provides for the mutual recognition of controls under certain circumstances. The application of this instrument will enable Customs administrations to adopt a broader and more comprehensive view of the global supply chain and create the opportunity to eliminate duplication and multiple reporting requirements.

5.2.4. SAFE FoS Pillar 2: Customs to Business Partnership

The Customs-to-Business Pillar contains standards for governments to work co-operatively with the private sector to secure the supply chain. The involvement of the private sector is crucial for ensuring that measures implemented are effective, reasonable, achievable and not unduly burdensome. Trade facilitation and trade compliance are ultimately two sides of the same coin. Facilitation that exceeds a reasonable threshold will undermine the job of customs and CBRAs to fulfil their regulatory mission. On the other hand, controls that are not grounded in the correct understanding of how a supply chain operates and burdensome to comply with will not only be ineffective, but will adversely affect a country's national competitiveness.

Just as Customs and CBRAs need to coordinate to reduce duplications and delays, the relationship between the Customs and private stakeholders is also necessary so that the private sector recognizes their responsibilities, and understand how best to work with Customs and CBRAs, so that their goods will not be subject to unnecessary delay. The SAFE FoS sets the standards for Customs administration to establish a partnership with the private sector in order to involve it in ensuring the safety and security of the international trade supply chain. The idea of an Authorized Economic Operator (AEO), which is a key concept that underpins that whole SAFE FoS is premised on the idea of partnership, with AEOs actively involved in implementing security into their operations, and Customs providing accreditation for their security measures against set standards, to maximize security and facilitation.

The SAFE Framework sets forth the criteria by which businesses in the supply chain can obtain authorized status as a security partner. Such criteria address issues such as threat assessment, a security plan adapted to the assessed threats, a communication plan, and procedural measures to prevent irregular or undocumented goods entering the international supply chain, physical security of buildings and premises used as loading or warehousing sites, security of cargo, means of transport, personnel vetting, and protection of information systems. Hence, the application of the SAFE FoS on CBM is very clear: greater assurance provided on the part of trusted AEOs allows Customs and CBRAs to focus on more high-risk areas, while facilitating the low-risk AEOs.

5.2.5. SAFE FoS Pillar 3: Customs to Other Government and Inter-Government Agencies

The Customs to other Government Agency and Inter-Government Agencies Pillar contains standards for Customs to work co-operatively with other government agencies involved with international trade and supply chain, as well as co-operation with foreign governments. The main objective of this cooperation is to ensure that the government response to the challenges of supply chain security is both efficient and effective, by avoiding duplication of requirements and inspections, streamlining processes, and ultimately working toward global standards that secure the movements of goods in a manner that facilitates trade.

The Standard emphasizes mutual cooperation between Customs other competent government agencies, such as aviation authorities, maritime and port security authorities, land transportation authorities, and Customs and Postal Operators, so that the alignment of

various security programs and regimes can take place, to achieve the harmonization of national control measures.

5.2.6. Mutual Recognition of AEOs

Mutual Recognition of AEO (MR) is an important instrument for international Coordinated Border Management. With MR, the contracting parties mutually recognize the other party's AEO so that facilitation can be accorded to the mutually recognized AEOs.

This is given effect through the signing of a formal document between two or more Customs administrations outlining the circumstances and conditions in which AEO programs are recognized and accepted between the signing parties. This Mutual Recognition Agreement (MRA) sets out the process to implement, evaluate, monitor and maintain mutual recognition. In addition, the MRA defines the benefits mutually provided to the AEOs by the participating Customs administrations and lays down the practical arrangements enabling the participating Customs administrations to provide those benefits.

5.2.7. Professionalism & Integrity in Customs Administration

Professionalism and integrity is essential to any CBM implementation. Trust and credibility must be firmly established between all CBRAs before effective collaboration can take place. Institutional arrangements have to be established, so that CBRAs operate on the basis of established processes and standard operating procedures, instead of through personal acquaintances and networks. Having trust in the system is essential for all CBRAs to recognize that their regulatory interests and responsibilities are built into the system in a streamlined and holistic way, and instills the recognition that they are not "losing control", but instead, working in a better way that enhances their effectiveness.

The Revised Arusha Declaration, the WCO Model Code of Ethics and Conduct, the Integrity Best Practices Compendium and the Integrity Development Guide provide essential guidance to administrations seeking to improve these areas.

In many Customs administrations, the concept of integrity means delivering services to meet the expectations of clients and stakeholders. Integrity can therefore be defined as: A positive set of attitudes which foster honest and ethical behavior and work practices.

Furthermore, Customs' performance is often regarded as a reliable barometer of how the public perceives the quality and integrity of government as a whole. Hence, the WCO is making a strong case for focusing more heavily on Customs integrity. Consequently, integrity and professionalism is important to Customs and CBRAs because:

- It increases public trust and confidence
- It prevents significant revenue leakage
- It contributes to voluntary compliance
- It facilitates international trade, foreign direct investment (FDI) and economic development
- It increases the level of national security and community protection.

5.3. Coordination of Enforcement and Controls

Customs and CBRAs exist to fulfil a regulatory mission. The regulatory mission may include revenue collection, ensuring that regulatory restrictions and prohibitions are enforced and trade policy is upheld.

In an ideal situation, there would be perfect information to achieve these worthwhile objectives and Customs and CBRAs would have perfect clarity and objectivity to make the right decisions all the time. Unfortunately, limitations exist. Hence, “effective regulation” needs to be understood in terms of what is realistic and achievable, within known constraints and limitations. Such constraints do not imply turning a blind eye to known defects in the system, but rather, working together with all stakeholders to recognizing them and undertaking rational and measured steps to mitigate them.

5.3.1. The Risk Management Compendium

A key tool that exemplifies this understanding of mitigating uncertainties and limitations is the concept of risk management. The increased complexity and volume of international trade, fueled by technological advances that have revolutionized global trading practices, have significantly affected the way Customs administrations carry out their responsibilities and organize their business operations. Today, Customs is required to provide extensive facilitation of trade while maintaining control over the international movement of goods, persons and means of transport. In seeking to achieve a balance between these goals, it was necessary for Customs to shift from traditional control methods, to new thinking and approaches to determine where the greatest areas of exposure to risk exist and how to effectively allocate scarce resources to manage these risks.

Risk management aims to understand and mitigate risks to a level that is “as low as reasonably possible” by analyzing risk-factors, their impacts and likelihood, and implementing a commensurate level of control to mitigate them.

The WCO Risk Management Compendium was developed to support members in developing their risk management programs through a common reference document for the concepts associated with risk management in Customs, and will assist Members in their efforts to develop and implement an all encompassing administration-wide approach to risk management.

From the perspective of governments and other stakeholders, the benefits of risk management include:

- A better balance between Customs control and trade and transport facilitation;
- Enhanced focus on “high-risk” movements of goods and passengers;
- Improved compliance with laws and rules;
- Reduced release times;
- Lower transaction costs;
- The creation of a level playing field for businesses;
- Improved cooperation between traders and Customs bodies;
- A better foundation for revenue collection.

Viewed from the perspective of CBM, Risk Management provides the tool to enable Customs and CBRAs to institute a structured and objective system for managing facilitation, as well as control. By working with CBRAs to integrate risk management into the regulatory process, it will be possible for risks to be managed in a comprehensive manner, through an integrated system. It enhances decision making by ensuring that goods are screened using risk criteria that had been developed by both Customs, as well as CBRAs, so that clearance decisions will be based on the consensus of all CBRAs. It also enhances flexibility in its ability to set different threshold levels for different risks and different stakeholders. By instilling objectivity into the automated clearance, decisions are less random and less

arbitrary. Through constant refinements, control decisions become more targeted, and more effective.

5.3.2. Interface Public-Members (IPM)

The fight against counterfeit products is an area where the ability to receive real-time information and disseminate to multiple parties greatly enhances operational effectiveness and success. Depending on the product and the domestic legislations in place, intellectual property rights infringements are often multi-faceted issues that may involve Customs, police, health agencies, consumer safety agencies, standards agencies and rights owners. A key challenge is the availability of authoritative information to verify suspicious shipments, which is needed by both Customs and CBRAs in order to take action on suspected counterfeit products.

The IPM anti-counterfeiting tool developed by WCO serves to enhance the ability of Customs and CBRA to verify the authenticity of suspicious products, and to facilitate communication between Customs, CBRAs and rights owners.

The system allows users to either search for the goods based on the product name or by scanning the bar code found on the product, and returns detailed information about the general information of the product, including the product description, packaging and characteristics, as well as side by side comparisons of real and previously detected examples of fake products. The common shipping routes for authentic products are also provided, so that suspicious shipments that deviate from the norm can be further investigated.

5.3.3. CEN, CEN Comm and nCEN

The Customs Enforcement Network (CEN) is a global system developed by the WCO for gathering data and information for intelligence purposes. It consists of a database, as well as an encrypted communication tool (CEN Comm) for facilitating the exchange and use of information and intelligence in a timely, reliable and secure manner.

The database contains non-nominal information of Customs seizures and offences which supports Customs and CBRAs in the analysis of illicit traffic in various areas.

The CEN contains 13 different headings and products covering the main fields of Customs enforcement including:

- Drugs
- Tobacco
- Alcoholic beverages
- CITES
- Intellectual property rights (IPR) - Counterfeiting
- Drug precursors
- Tax and duty evasion
- Weapons and explosives
- Currency
- Nuclear materials
- Hazardous material
- Pornography / Paedophilia
- Other prohibitions and restrictions (including works of art, stolen vehicles, anabolic steroids etc.)

The diverse coverage of CEN allows Customs to effectively support the operations of CBRAs, as well as provides insights to CBRAs on new or emerging threats, so that both Customs and CBRAs are better able to work effectively together to formulate effective responses.

The CEN Comm infrastructure also provides a secure messaging tool for National Contact Points to disseminate information and coordinate responses during operations, so that timely intelligence leads to actionable responses.

The National Customs Enforcement Network (nCEN) complements CEN by providing members who had not yet built an enforcement database with a low-cost tool to collect, store and exchange law enforcement information without interfacing with the global CEN database. The application collects and stores of nominal enforcement data at a national level while an Information Communication Interface (Icomm) facilitates the exchange of non-nominal data between Customs administrations on the international level.

5.4. WCO Tools Relating to Coordination of Information Technology Developments

The use of information technology in border processes enables Customs and CBRAs to unlock a strategic level of capability that is important to many aspects of border modernization, such as risk management, advanced electronic declarations and risk management.

The key challenge in the development of IT services lies in the fact that this is typically done at the agency level, with each CBRA having authority over their own systems. This is a situation that is unlikely to change overnight as IT projects will always be dependent of factors including funding, specific agency requirements, the need to maintain support for legacy systems and legal restrictions that prevents agencies from accessing each other's data.

However, this situation can be mitigated through increased communication and consultation between agencies so that even if agencies are not committing to use the same systems, they make an effort to establish inter-operability between systems so that the enhanced interactivity between systems and agencies reduces duplications and leads to more effective CBM.

5.4.1. WCO Data Model

The WCO Data Model defines the maximum data requirements for key import, export and transit-related procedures. In its entirety, the Data Model contains approximately 450 data elements that are subject to regular review and annual releases. These data sets should be considered the primary source for the design and development of cross-border single window systems.

While these data sets define the maximum requirement, Customs and CBRAs would only request the minimum number of data elements necessary to administer their specific legislative or regulatory mandate so as to reduce burden on traders and prevent the proliferation of unnecessary and unusable data collected.

The intent of the WCO is for customs administrations to accept the relevant portion of the WCO data set for customs procedures, provided that all the required data elements are received electronically using specified electronic formats. The WCO data model also includes data elements commonly used by CBRAs in its Licenses, Permits, Certificates and Others (LPCO) Package. This offers traders the ability to transmit data to any administration without resetting their computer format, while also enabling multinational traders to rationalize the maintenance of various interfaces to Customs IT systems. This enhances the ability of administrations to share data with each other through improved system interoperability.

The WCO DM may be implemented with or without a Single Window environment, as it serves as a standardized data requirement library for Business to Government (B2G) and the Government to Government (G2G) exchange of information.

5.4.2. Harmonizing Information Requirements

The WCO Data Model also greatly facilitates information harmonization to avoid duplications. The **WCO Data Harmonization Guidelines** provides specific guidance on how this is done to achieve a simplified and harmonized data-set that meets the needs of Customs and CBRAs, so that information requirements are transparent, streamlined and unified.

Data harmonization is achieved through 4 steps:

- **Data Capturing:** To assemble an inventory of customs and CBRA data requirements
- **Defining:** Naming and establishing the use and definition of the data element
- **Analysing:** Gaining a full understanding of every data element and definition
- **Reconciling:** Streamlining the data elements captured, so that a common definition is used for similar data elements, and duplications and redundancies are eliminated. In the case of Single Window development, the data elements are also reconciled with the WCO Data Model standard, so that it facilitates the development of electronic forms and functional messages.

The Single-Administrative Document is a good example of the level of simplifications that this process can achieve, where all the information requirements for Customs and CBRAs are distilled into a single form.

The harmonization of information requirements between agencies is desirable, whether as an exercise to minimize and standardize the paper forms to enhance CBM, or as part of the process to develop electronic systems such as a single-window environment.

A data harmonization exercise to streamline paper forms can serve as an essential first-step to engage and promote greater coordination among CBRAs, so that information does not have to be duplicated across different paper forms. This reduces hassle for the trade. However, it should also be noted that paper is limited by its ability to disseminate information in real-time. Paper-based information is also not structured and does not allow itself to be analyzed quickly. This aspect will have an influence on risk management. Material-handling of paper forms by the trade is also cumbersome to both trade, and customs.

The material handling and dissemination challenges can be partly addressed through the use of scanned documents, so that physical movement of papers is replaced by electronic

transmission of scanned images instead. But scanned documents are not without their limitations, due to their large file sizes as well as the fact that they remain unstructured data that do not allow it to be analyzed for through system validation checks and risk management.

5.4.3. The Electronic Single Window

An electronic single window may be considered as the electronic manifestation of Coordinated Border Management. UN/CEFACT Recommendation Number 33 refers to the Single Window as “a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. If information is electronic, then individual data elements should only be submitted once”.

The WCO elaborates on the term through its definition of a “Single Window Environment”, which refers to “a cross border, ‘intelligent’, facility that allows parties involved in trade and transport to lodge standardized information, mainly electronic, with a single entry point to fulfill all import, export and transit related regulatory requirements”.

The WCO definition is largely in line with UN/CEFACT Recommendation 33, but with greater emphasis on the “intelligent facility” aspect of a single-window. This is because the Single Window is not just the “portal” to a set of facilities. It is the means through which shared smart services are provided to users and such services include data submission, computation of duties and taxes, coordinated risk management, shared operational controls and integrated inter-agency business process and workflows.

Such a definition focuses on the value proposition, as opposed to the technical means, which ultimately, need to be premised on the process alignment between different government agencies, so that goods and information flow seamlessly.

The 2-volume Single Window Compendium provides essential know-how for single-window development. Volume 1, catered to high-level decision makers, covers strategic issues such as policy planning, legal issues and human resource change management.

Volume 2 is a practitioners’ guide and include essential know-how for tasks that a single-window implementation team would be required to undertake including functional assessment, data harmonization, business process analysis, dematerialization of supporting documents and single window architecture.

The 2 volumes provide useful guidance to Customs and CBRA partners in a single-window implementation journey.

5.4.4. Globally Networked Customs

The Globally Networked Customs is conceived as a more effective way for countries to implement information exchange agreement through a standardized approach, using generic templates and blueprints. It seeks to shift the existing ways in which individual exchanges are currently negotiated and implemented, in favour of a standardized process based on standards, protocols and guidelines, so that the legal elements, technical details and implementation process can be adapted from a pool of GNC-Compliant solutions that had been tried and tested by WCO members.

At the heart of the GNC concept is the legal toolkit, the Utility Block and the Proof-of-Concept. The legal toolbox provides standardized legal provisions that should be included in any information exchange agreement so as to provide a legal basis to the use of the GNC concept, the Utility Block provides the template that details the functional aspects of the exchange, including how the exchange of information is triggered, the types of information or data exchanged, and the IT specifications of the exchange. The Proof-of-Concept establishes the feasibility of the arrangement and provides certainty that the GNC exchange is functional, scalable and can be applied to other members undertaking similar exchanges.

5.5. Strategic value of applying WCO tools for CBM

WCO Tools and instruments provide the effective mechanisms for the concrete implementation of coordinated border management across the 3 essential areas:

- Coordination of procedures and formalities
- Coordination of enforcement and controls
- Coordination in information technology developments

The guidelines and compendiums provide guidance and practical know-how to Customs administrations. The sharing of such technical know-how between Customs and CBRAs also fosters greater understanding between both parties.

The system tools, such as CEN, nCEN and IPM are not just tools that can be used by Customs, but tools that can be shared with CBRA partners, so that new capabilities are shared and lead to greater effectiveness. This reduces the cost of having to develop new systems, particularly when existing WCO offerings already exist, and can be used to enhance communication and information sharing between Customs and CBRAs.

CHAPTER 6: OTHER ORGANIZATIONS' INSTRUMENTS & TOOLS

6.1. Standards relating to CBRAs

The previous chapters had addressed the issue of how WCO's tools and instruments support Customs administrations and CBRAs in Coordinated Border Management. It should be noted, however, that just as Customs is not the sole agency at the border, CBRAs are also guided by international standards in their work and it is necessary for both Customs and CBRAs to acquire working knowledge of each others' standards in order to arrive at a common understanding that enhances CBM.

The following list of standards are not exhaustive, but they provide a sample of the diversity, as well as areas of convergence between Customs and CBRAs that is aimed at promoting greater understanding between agencies.

6.2. Standards of the International Plant Protection Convention (IPPC)

The International Plant Protection Convention (IPPC) is an international plant health agreement established in 1952 that aims to protect cultivated and wild plants by preventing the introduction and spread of pests while minimizing interference with the international movement of goods and people. As of July 2014, there are 181 Contracting parties to the Convention and the IPPC is one of the main SPS (Sanitary & Phyto Sanitary) standard setting organizations recognized by the World Trade Organization.

The IPPC Secretariat is responsible for the coordination of core activities under the IPPC work programme. The Secretariat is provided by the Food and Agriculture Organization of the United Nations.

The 1952 agreement was subsequently revised in 1979 and the amendments came into force in 1991. The revised Convention included the following key features:

- Emphasis on cooperation and information exchange;
- Encouraging harmonisation of phytosanitary measures by basing them on international standards;
- Providing the framework for the Commission on Phytosanitary Measures (CPM) – the governing body of the IPPC, which develops and promotes the use of International Standards for Phytosanitary Measures (ISPMs);
- Establishing the IPPC Secretariat and procedures for standard setting;
- Aligning the Convention with the Agreement on the Application of Sanitary and Phytosanitary Measures – the SPS Agreement – of the World Trade Organization (WTO);
- Responsibilities for contracting parties to promote technical assistance to other parties; and
- Introducing modern plant protection practices such as pest risk analysis to support phytosanitary measures, the designation of pest free areas and the phytosanitary security of export consignments.

6.2.1. Phytosanitary Principles for The Protection of Plants and the Application Of Phytosanitary Measures in International Trade

The “Phytosanitary Principles for The Protection of Plants and the Application of Phytosanitary Measures in International Trade” are a set of standards that describe phytosanitary principles for the protection of plants. It covers principles related to the protection of plants, including cultivated and non-cultivated/unmanaged plants, wild flora and

aquatic plants, those regarding the application of phytosanitary measures to the international movement of people, commodities and conveyances, as well as those inherent in the objectives of the IPPC.

The 11 basic principles set out in the standard are:

- (i) **Sovereignty:** Contracting parties have sovereign authority, in accordance with applicable international agreements, to prescribe and adopt phytosanitary measures to protect plant health within their territories and to determine their appropriate level of protection for plant health.
- (ii) **Necessity:** Contracting parties may apply phytosanitary measures only where such measures are necessary to prevent the introduction and/or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests.
- (iii) **Managed risk:** Contracting parties should apply phytosanitary measures based on a policy of managed risk, recognizing that risk of the spread and introduction of pests always exist when importing plants, plant products and other regulated articles, and implementing measures that were consistent with the pest risk involved.
- (iv) **Minimal impact:** Contracting parties should apply phytosanitary measures with minimal impact, consisting of the least restrictive measures available so as to immunize impediments to the international movement of conveyances, goods and people.
- (v) **Transparency:** Contracting parties shall make relevant information available to other contracting parties as set forth in the IPPC.
- (vi) **Harmonization:** Contracting parties should cooperate in the development of harmonized standards for phytosanitary measures.
- (vii) **Non-discrimination:** Contracting parties should, in accordance with the IPPC, apply phytosanitary measures without discrimination between contracting parties if contracting parties can demonstrate that they have the same phytosanitary status and apply identical or equivalent phytosanitary measures.
- (viii) **Technical justification:** Contracting parties shall technically justify phytosanitary measures on the basis of conclusions reached by using an appropriate pest risk analysis or, where applicable, another comparable examination and evaluation of available scientific information.
- (ix) **Cooperation:** Contracting parties should cooperate with one another to achieve the objectives of the IPPC.
- (x) **Equivalence of phytosanitary measures:** Importing contracting parties should recognize alternative phytosanitary measures proposed by exporting contracting parties as equivalent when those measures are demonstrated to achieve the appropriate level of protection determined by the importing contracting party.
- (xi) **Modification:** Modifications of phytosanitary measures should be determined on the basis of a new or updated pest risk analysis or relevant scientific information. Contracting parties should not arbitrarily modify phytosanitary measures.

6.3. Standards of the World Organization for Animal Health (OIE)

The World Organization for Animal Health came into being in 1924 and was known as the “Office International des Epizooties” until 2003, when it adopted its current name, the World Organization for Animal Health while retaining its historical acronym, OIE. It is the intergovernmental organization responsible for improving animal health worldwide. As of 2013, it has 178 member countries.

The organization is headquartered in Paris and overseen by a Director-General elected by its World Assembly of Delegates, consisting of delegates designated by the Governments of all Member Countries.

The organization serves as coordinating body to receive report on animal disease situation from its member countries and disseminates the information to other countries so that preventive action can be taken. It also collects and analyses the latest scientific information on animal disease control and makes such information available to its members to improve methods used to control and eradicate animal diseases.

The OIE also develops standards for the international trade in animals and animal products that enables its members to protect themselves from the introduction of animal diseases and pathogens, without setting up unjustified sanitary barriers.

6.3.1. The Terrestrial Animal Health Code and the Aquatic Animal Health Code

The OIE is the WTO reference organisation for standards relating to animal health and zoonoses (diseases that can be transmitted to humans from animals). The OIE publishes 2 codes (Terrestrial and Aquatic) and 2 manuals (Terrestrial and Aquatic) as the principle reference for WTO members. The Terrestrial Animal Health Code and Aquatic Animal Health Code respectively aim to assure the sanitary safety of international trade in terrestrial animals and aquatic animals, and their products.

The Terrestrial Animal Health Code was first published in 1968 and the Aquatic Animal Health Code was introduced to the public in 1995. The codes traditionally addressed animal health and zoonoses. In recent years, they have been expanded to cover animal welfare and animal production food safety.

The *Terrestrial Code* and the *Aquatic Code* contain science-based recommendations for disease reporting, prevention and control and for assuring safe international trade in terrestrial animals (mammals, birds and bees) and aquatic animals (amphibians, fish, crustaceans and molluscs) and their products. The *Codes* detail the sanitary measures for animal diseases, including zoonoses, which should be used by the Veterinary Services and other Competent Authorities of importing and exporting countries. Correctly applied, these measures prevent the introduction and spread, via animals and their products, of agents that are pathogenic for animals and/or humans.

Other standards, such as the Manual of Diagnostic Tests and Vaccines for Terrestrial Animals and the Manual of Diagnostic Tests for Aquatic Animals provide a harmonised approach to disease diagnosis by describing internationally agreed laboratory diagnostic techniques.

The *Terrestrial Manual* and the *Aquatic Manual* contain OIE international standards on quality management in testing laboratories, principles of validation and quality control of diagnostic assays, and diagnostic testing methods for specific diseases including official tests listed in the *Terrestrial* and *Aquatic Codes*. The *Terrestrial Manual* also provides generic and specific guidance on vaccine quality. In addition to the *Manual*, the OIE publishes a list of approved Standard Sera (reagents) produced by OIE Reference Laboratories, validates and certifies commercially-available diagnostic assays, and publishes a list of the tests certified 'fit for purpose' in the OIE Register of Diagnostic Tests. Assessment of diagnostic tools for terrestrial animals is carried out under the auspices of the OIE Biological Standards Commission (Laboratories Commission). For aquatic animals, assessment of diagnostic tools is the responsibility of the Aquatic Animal Health Standards Commission (Aquatic Animals Commission).

6.4. Standards of the Codex Alimentarius Commission

While efforts to enhance food safety and achieve greater international harmonization pre-dates the formation of the organization, such efforts were given a big push when the Codex

Alimentarius Commission was established in 1961 at the eleventh session of the Conference of Food and Agriculture Organization of the United Nations (FAO). Subsequent involvement by the World Health Organization led to the approval to establish the Joint FAO/WHO Food Standards Programme with the Codex Alimentarius Commission as its principal organ and cleared the way for the commission to hold its first session in Rome in October 1963¹.

Since that time, the Codex Alimentarius international food standards, guidelines and code of practices had contributed to the safety, quality and fairness of the international food trade and provided greater assurance to consumers. The Codex Alimentarius Commission currently has 186 members and 224 observers.

Important issues discussed by Codex include biotechnology, pesticides, food additives and contaminants. The application of Codex standards by its members is voluntary, but in many cases, Codex standards serve as the basis for national legislations. References are also made to Codex food safety standards in the WTO Agreement on Sanitary and Phytosanitary measures (SPS Agreement).

6.4.1. Codex Alimentarius Publications

The work of the Codex Alimentarius is published in a collection of standards, codes of practices, guidelines and recommendations. They include:

- **Commodity-specific standards** (e.g. standard for canned strawberries, standard for canned shrimps or prawns, standard for quick frozen cauliflower)
- **Codex general standards** that apply for all commodity-specific standards (e.g. Codex general standards for food additives, contaminants and toxins, Codex general standard for the labeling or prepackaged foods, Codex methods of analysis and sampling)
- **Codex code of practice** addressing hygiene practice, production, processing, manufacturing, transport and storage practices for individual foods or groups of foods that are essential to ensure the safety and suitability of food for consumption.
- **Codex Guidelines** that set out policy in key areas and guidelines for interpreting essential principles and provisions of codex general standards. Interpretative Codex guidelines include those for food labeling, especially the regulation of claims made on the label. This group includes guidelines for nutrition and health claims; conditions for production, marketing and labeling of organic foods; and foods claimed to be “halal”. There are several guidelines that interpret the provisions of the Codex Principles for Food Import and Export Inspection and Certification, and guidelines on the conduct of safety assessments of foods from DNA-modified plants and micro-organisms.

6.5. The WTO Agreement on the Application of Sanitary & Phytosanitary (SPS) Measures

The International Plant Protection Convention Secretariat, the World Organization of Animal Health and the Codex Alimentarius Commission are recognized as standard setting organizations under the WTO Agreement on the Application of SPS Measures. This means that for the purpose of Article 3 of the Agreement, “international standards, guidelines or recommendations refer:

- (i) For food safety, the standards guidelines and recommendations established by the **Codex Alimentarius Commission**;

¹ Randell, Alan, *Codex Alimentarius: how it all began*, <http://www.fao.org/docrep/v7700t/v7700t09.htm>

- (ii) For animal health and zoonosis, the standards, guidelines and recommendations developed under the auspices of the **World Organization of Animal Health**;
- (iii) For plant health, the international standards, guidelines and recommendations developed under the auspices of the Secretariat of the **International Plant Protection Convention**.

The Agreement on the Application of Sanitary and Phytosanitary (SPS) Measures entered into force on 1 January 1995. The Agreement on the Application of Sanitary and Phytosanitary Measures sets out the basic rules for food safety and animal and plant health standards. It allows countries to set their own standards, but also imposes the primacy of science as the basis for SPS regulations and for such measures to be applied objectively in a non discriminatory measure and only to the extent necessary to protect human, animal or plant life or health.

Member countries of the WTO are encouraged to use international standards, guidelines and recommendations established by the IPPC, the OIE and Codex, or measures which result in higher standards if there is scientific justification. The agreement still allows countries to use different standards and different methods of inspecting products and countries can set higher standards based on appropriate assessment of risks so long as the approach is consistent and not arbitrary.

6.6. Commonalities between Customs and CBRA Standards & Tools

The multiplicity of agencies at the border is a fact of modern border operation and SPS authorities represents some of the key agencies that Customs works with on a regular basis and from the summary provided above, it can be seen that the work of SPS agencies, are also guided by international standards premised on the basic need for fairness, objectivity, harmonization and transparency. An understanding of the points of convergence between these international standards and Customs is absolutely necessary to achieve greater levels of coordination in border processes.

While it may not appear that the work of Customs has much in common with agriculture, animal health and good safety agencies at first glance, a deeper understanding of the standards and work of these agencies reveals the following similarities.

6.6.1. Trade Facilitation

The WTO SPS Agreement states that “members should, when determining the appropriate level of sanitary or Phytosanitary protection, take into account the objective of minimizing negative trade effects”. The objective of SPS regulations are not solely intended to keep dangerous pests, diseases and products out of the border, but to ensure the smooth trade of animal, agricultural and food product. A lapse in SPS regulations can lead to the spread of agricultural pests that can devastate farms, the spread of animal diseases that renders livestock unsafe for consumption, the spread of diseases that endangers human health and the distribution of tainted food that adversely affects human health.

Such incidents can seriously damage a country’s economy, destroy the livelihoods of food producers and disrupt trade. However, these controls are made effective and possible, not by excessive regulations, but by harmonized and measured ones, based on international standards and scientific evidence.

6.7. Risk Management in Coordinated Border Management

The use of risk management in cross-border work is not limited to Customs. Risk management is deployed in many SPS functional areas as well. However, the understanding of risk between Customs and CBRAs are not always the same and achieving greater understanding between Customs and CBRAs in the applications of risk management is necessary before greater collaboration can be enabled.

6.7.1. IPPC Framework for Pest Risk Analysis

The IPPC Framework for Pest Risk Analysis (PRA) is a standard that describes the 3 stages of pest risk analysis for the purpose of evaluating scientific evidence to determine whether an organism is a pest, the probability of introduction and spread of the pest and the potential economic impact in a defined area, if the pest was introduced and allowed to spread. This analysis then provides the rationale for the appropriate Phytosanitary measures for that specified PRA area.

The 3 stages of PRA are:

- Stage 1: Initiation – The identification of organisms and ways in which the pest could be introduced (i.e. pathways).
- Stage 2: Pest risk assessment – The categorization of the pest to determine if the organism has the characteristics of the organism, the assessment of the introduction and spread of the pest, the assessment of the economic impact and the conclusion summarizing the overall pest risk on the basis of this assessment.
- Stage 3: Pest risk management – The identification of Phytosanitary measures that reduces the pest risk to an acceptable level.

The IPPC Framework also addresses aspects common to all PRA stages such as:

- The recognition of uncertainty as an inherent component of risk and the need to document, communicate and seek expert judgment to mitigate uncertainty. The presence of uncertainty may also require additional monitoring so that decisions can be re-evaluated when necessary.
- The need for information gathering throughout the whole process through scientific publications and technical information, and to address information gaps that are identified during the information gathering process.
- The need for documentation to enhance transparency so that technical justification for Phytosanitary requirements can be made available to other contracting parties on request.
- An interactive risk communication process to allow for the exchange of information between National Plant Protection Organizations and stakeholders to raise awareness and achieve a common understanding of the pest risk, so as to develop credible and consistent regulation policies to deal with pest risks.

- Ensuring consistency in the conduct of PRAs to facilitate the principles of non-discrimination and transparency. Consistency is also important for improving familiarity with the PRA process, increasing the efficiency in completing PRAs and for improving comparability between PRAs on similar products or pests.
- Avoiding undue delays, particularly when other contracting parties are directly affected by ongoing PRAs.

6.7.2. OIE Risk Analysis

The Terrestrial Animal Health Code and Aquatic Animal Health Code of the OIE both contain the same chapter on risk management. The emphasis of the OIE is in providing importing countries with an objective and defensible method of assessing the disease risks associated with the importation of animals, animal products, animal genetic materials, foodstuffs, biological products and pathological materials.

The OIE identifies 4 components in risk analysis:

- Hazard identification: the process of identifying the pathogenic agents which could potentially produce adverse consequences associated with the importation of a commodity
- Risk assessment: the quantitative or qualitative estimation of risks associated with a hazard
- Risk management: the evaluation of the risk estimate as well as the evaluation and implementation of options to reduce the risk associated with an importation to an acceptable level
- Risk communication: the process of providing information regarding hazards and risks are gathered from potentially affected and interested parties during risk analysis, as well as the providing of information relating to the risk management measures to decision makers and interested parties in both importing and exporting countries.

Essentially, in the control of animal diseases, risk management is seen as the process of deciding upon and implementing measures to achieve the country's appropriate level of protection, while ensuring that negative effects on trade are minimized. The objective is to manage risk appropriately to ensure that a balance is achieved between a country's desire to minimize the likelihood or frequency of disease incursions and their consequences and the country's desire to import commodities and fulfill its obligations under international trade agreements.

6.7.3. Codex Alimentarius Working Principles for Risk Analysis for Food Safety for Application by Governments

The Working Principles for Risk Analysis for Food Safety for Application by Governments of Codex Alimentarius are intended to provide guidance to national governments for risk assessment, risk management and risk communication with regard to food related risks to

human health. The Working Principles identify 3 distinct, but inter-related components for risk analysis:

- Risk assessment: A scientifically based process consisting of (i) hazard identification, (ii) hazard characterization, (iii) exposure assessment and (iv) risk characterization.
- Risk management: The process, distinct from risk assessment, of weighing policy alternatives, in consultation with all interested parties, considering risk assessment and other factors relevant for the health protection of consumers and for the promotion of fair trade practices, and, if needed, selecting appropriate prevention and control options.
- Risk communication: The interactive exchange of information and opinions throughout the risk analysis process concerning hazards and risks, risk-related factors and risk perceptions, among risk assessors, risk managers, consumers, industry, the academic community and other interested parties, including the explanation of risk assessment findings and the basis of risk management decisions.

In the risk assessment phase, hazard identification refers to the identification of biological, chemical and physical agents capable of causing adverse health effects which may be present in a particular food or group of foods. Once identified, the hazard characterization phase provides for a qualitative or quantitative evaluation of the nature of the adverse health effects of these hazards.

This is further elaborated through an exposure assessment, in which the qualitative and / or quantitative evaluation of the likely intake of the hazard identified is determined and finally, the risk characterization, in which the qualitative and / or quantitative estimate, including the attendant uncertainties of the probability occurrence and severity of known or potential health effects in a given population based on the previous phases is determined.

The Working Principles further elaborates on the issues that countries need to be attentive to in the conduct of risk management, including:

- Transparency, consistency and comprehensiveness: risk management should be transparent, consistent and fully documented. Decisions on risk management should be documented so as to facilitate a wider understanding of the risk management process by all interested parties. The primary objective of sanitary measures taken should be to protect the health of consumers. Unjustified differences in the measures selected to address similar risks in different situations should be avoided. Risk management should also take into account relevant factors comprehensively including production, storage and handling practices used throughout the food chain, methods of analysis, sampling and inspection, feasibility of enforcement and compliance and the prevalence of specific adverse health effects.
- Structured approach and risk-based decision making: risk management should follow a structured approach that includes preliminary risk management activities, evaluation of options, implementation, monitoring and review of decisions taken. Risk assessment and risk management should be functionally separate to the extent possible, to ensure scientific integrity and to avoid confusion and conflict of interests between risk assessors and risk managers. Decisions undertaken should also be based on risk

management and should be proportionate to the assessed risk. Risk management should also take into account the economic consequences and the feasibility of risk management options.

- **Managing uncertainties:** Uncertainties exist in risk assessment and risk management of food related hazards to human health. The degree of uncertainty and variability in scientific information needs to be explicitly considered in risk analysis. The assumptions used for the risk assessment and risk management options should reflect the degree of uncertainty and the characteristics of the hazard.
- **Engagement between governments and international organizations:** Countries should take into account relevant guidance and information obtained from risk analysis activities pertaining to human health protection conducted by Codex, FAO (Food and Agricultural Organization), WHO (World Health Organization) and other relevant international intergovernmental organizations, including OIE and IPPC. Countries should also share information and experiences on risk analysis with relevant international organizations and other national governments to promote and facilitate a broader and, where appropriate more consistent application of risk analysis.

6.7.4. Synthesis of CBRA requirements with Customs in Risk Management

As shown in the previous paragraphs, while the fundamental conduct of risk management and the desired outcomes that it seeks to achieve are common across Customs and CBRAs, there are also notable differences.

One of the most obvious differences is the use of scientific methods and data in risk management. Due to the nature of SPS controls, this is natural – the spread of pests and diseases and possible contamination of food products need to be rooted in scientific evidence and rigorously understood in scientific terms in order for effective risk-based decision making to be effective.

However, aside from this essential difference in the sources of information used, the challenges of using risk management for border control by SPS authorities are little different from Customs administrations – the management of uncertainties, the lack of objective information, challenges in linking cause and effect, difficulties in deriving quantitative evidence to determine likelihood and impact, imperfect data quality hindering objective decision making and the need to engage, communicate and foster an interactive process with stakeholders so that risk-based decisions can be fine-tuned and kept relevant.

An understanding of how different CBRAs execute the risk management process is an important step in bringing counterparts together to maximize the effectiveness of control in their respective area, where possible, to enrich the understanding of their operating environment through the collective knowledge, experience and expertise of Customs and CBRAs and to build a more effective and efficient CBM process.

Annex: Country Practices & Experiences

United States of America - Border Interagency Executive Council

On February 19, 2014, President Obama signed Executive Order 13659, Streamlining the Export/Import Process for America's Businesses, which, among other things, formally established the Border Interagency Executive Council (BIEC) to develop policies and processes to enhance coordination across customs, transport security, health and safety, sanitary, conservation, trade, and phytosanitary agencies with border management authorities and responsibilities to measurably improve supply chain processes and improve identification of illicit shipments. The BIEC is chaired by the Department of Homeland Security with a Vice Chair to be selected every two years among BIEC members.

The BIEC held its Inaugural Meeting on March 10, 2014, chaired by DHS Deputy Secretary and attended by BIEC department and agency senior leadership, as well as senior representatives from the National Security Council (NSC), the National Economic Council (NEC), the Office of Management and Budget (OMB), and the U.S. Trade Representative (USTR). At this meeting, the Consumer Product Safety Commission (CPSC) was nominated and agreed to serve as the Vice Chair. BIEC members also approved a charter and established three committees for Risk Management, External Engagement, and Process Coordination to carry out the seven BIEC functions outlined in the EO.

BIEC membership is at the Department level and includes representatives from the following departments and independent agencies.

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Health and Human Services
- U.S. Department of Homeland Security
- U.S. Department of the Interior
- U.S. Department of Justice
- U.S. Department of State
- U.S. Department of Transportation
- U.S. Department of the Treasury
- U.S. Consumer Product Safety Commission
- U.S. Nuclear Regulatory Commission
- U.S. Environmental Protection Agency

A critical success factor in implementing coordinated border management is the establishment of a high level forum to resolve issues pertaining to interagency collaboration and enable effective integrated government action. The EO formally enhanced collaboration efforts between the work of the BIEC and the International Trade Data System (ITDS) Board of Directors to drive policy coordination among the technical experts engaging on single window development (ITDS Board of Directors) and the high-level policy decision makers (BIEC) to focus on improving border management policies and processes across the U.S. government in partnership with non-governmental stakeholders

The International Trade Data System (ITDS) Board of Directors was established under the Security and Accountability for Every Port Act of 2006 (SAFE Port Act). The SAFE Port Act directed all agencies that require documentation for the import and export of cargo to participate in ITDS to establish a single portal system, or single window, for the collection and distribution of trade data. With the issuance of the EO, the Secretary of the Treasury continues to oversee the development of the single window through ITDS. The EO also

established a December 2016 deadline for completion and government-wide utilization of ITDS.

The experience of the United States provides strong support of political will as a critical success factor in implementing coordinated border management. BIEC leadership continues to demonstrate a strong interest in BIEC efforts and reinforced the need for departments and agencies to maintain urgency and high-level commitment in accomplishing the aggressive deadlines outlined in the EO. Representatives from the Executive Office of the President, including the NSC, NEC, USTR, and OMB, continue to monitor the progress of BIEC initiatives closely and track the specific deliverables.

The formation of the BIEC was ultimately premised on the understanding that CBP could not successfully execute its mission on its own and interagency collaboration is fundamental to achieving its modernization goals. The Border Interagency Executive Council (BIEC) enables CBP and partner government agencies to continue to work towards a “one-government” approach governing the movement of goods across our national borders.

Singapore: TradeNet, Singapore's National Single Window

One of the major trade barriers is the ease of obtaining regulatory approval for the import, export or transshipment of goods. In a conventional pre-national-single-window environment, traders have to manually submit different applications to different government authorities. A single national electronic window system allows a single electronic application to be submitted to all relevant government authorities for processing and approval.

TradeNet is Singapore's National Single Window. This is an online trade declaration facility linked with the relevant governmental agencies so that traders need not approach the individual agencies for licensing applications and documentation.

The Challenge of Trade Documentation

Before the implementation of TradeNet, traders had to interact with several agencies including then-Customs and Excise Department (CED), port authorities, then-Trade Development Board (TDB) and Competent Authorities (CAs), as well as comply with the different rules for the importation, exportation and transshipment of goods.

Preparing multiple copies of the trade declaration forms and physically carrying them to the various government offices for processing meant that a two-day turnaround was common.

The cost of trade documentation was about 4 to 7 per cent of the value of goods shipped and it seemed like a lot of work with little payoff.

With Singapore being a small country with no natural resources and limited manpower, staying successful meant improving competitiveness, especially in external trade which was the largest business sector. Cutting costs was inevitable, and the 4 to 7 per cent was the best place to start.

Getting all on board

The idea of a National Single Window (NSW) was born from high-level government discussions in the 1980s on continued economic growth. The recession of 1985 and 1986 is a turning point in Singapore's economic development. A high-level Economic Committee was convened by the government to consider options for continued development of the Singapore economy. Improvement in the efficiency of trade was named then as a major goal².

The efforts to improve efficiency of trade brought together key government agencies involved with trade, as well as private sector groups. These government and private sector players included:

- Trade Development Board
- Customs and Excise Department
- Port of Singapore Authority
- Jurong Town Corporation
- Civil Aviation Authority of Singapore
- Singapore Telecoms
- Other CAs
- Singapore National Shipping Association

² Harvard Business Review, Singapore Tradenet: A Tale of One City, September 30, 1995

- Singapore Freight Forwarders Association
- Singapore Air Cargo Agents Association
- Board of Airline Representatives
- Federation of Chambers of Commerce and Industry

A TradeNet Steering Committee was created to oversee the process and organize the intensive efforts needed to streamline trade procedures. The Steering Committee was supported by 3 working sub-committees, namely, the Maritime Community Sub-committee, the Air Community Sub-committee and the Government Sub-Committee.

TradeNet, Singapore's National Single Window, involved much more than an IT system. There were changes required to be made for procedures and the way the government and private sector went about their work in terms of trade documentation and regulation.

Thus, the subcommittees of the TradeNet Steering Committee met extensively over several months, investigating and streamlining trade procedures and developing a profile of essential trade documentation activities that were to be incorporated in the new procedures. Each subcommittee produced a report, and these reports were integrated into an "Integrated Procedures Report" that served as the focal point of procedural reform and system development discussions.

There were also extensive consultation with companies industry associations, seeking their feedback so as to develop a National Single Window that would meet industry's needs.

Such extensive change management and consultations eventually led to buy-in within government and the private sector to develop TradeNet. All relevant parties agreed that significant savings would result from reducing the burden of trade documentation handling. Streamlining trade would also make the Singapore trading community more competitive internationally.

In December 1986, the TradeNet project was announced with a target to bring the system online within two years.

Building TradeNet

Building TradeNet was a challenge. To have it go live on time, the TradeNet team focused on simplifying information required for 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. The first transaction was an application from an air cargo agent and the approved document was received 10 minutes later. With TradeNet operational, traders would henceforth transact with Customs (for imports) and the Trade Development Board (for exports) via TradeNet.

During the launch of TradeNet in 1989, the current Prime Minister of Singapore Lee Hsien Loong, who was then Minister of Trade and Industry, described TradeNet as a "strategic infrastructure" which is an important productivity tool and called for "full paperless documentation by 1992"³.

³ 'Full paperless documentation by 1992', The Strait Times, 18 Oct 1989
<http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19891018-1.2.56.20.aspx>

By December 1989, TradeNet handled about 45 per cent of all trade documentation for sea and air shipments. The success led to the government mandating the use of TradeNet for all trade transactions in 1991, ahead of schedule.

In 1995, users' productivity has gone up by 20 to 30 per cent and costs were down by as much as 50 per cent.⁴

Today, under the purview of the Singapore Customs, 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. Thus, the cost and turnaround time for the preparation, submission and processing of trade and shipping documents are reduced. Together with a risk management approach using the information declared by traders in TradeNet, cargoes which are assessed to be of low risk were cleared quickly without unnecessary delays at the border.

Strengthening Engagement with Other Government Agencies and Traders

With the implementation of TradeNet, the focus shifted from reform and streamlining to sustainability and continuous improvements. Updates of TradeNet were rolled out every 3 to 5 years. This ensured that TradeNet kept pace with changing industry needs.

The Customs Advisory Council was established in 2000 with public and private sector members to advise on the strategic directions of Singapore Customs. The Council deliberates on Customs-related initiatives and provides feedback and advice on industry trends, government policies and other matters that may affect cross-border trade and the delivery of border services. It also functions as an active platform to solicit external advice from the business sector.

Efforts in pursuing organizational excellence led Singapore Customs to adopt the Business Excellence Framework published by the national standards and accreditation body, SPRING Singapore⁵. This framework provided the guidance for Singapore Customs' systems, processes and relations with core stakeholders and customers.

Singapore Custom's focus on organization excellence led to improvement in stakeholder and customer engagement in 7 key areas:

- **Leadership:** as part of the planning process, the senior management of Singapore Customs reviews the department's partnerships with key partner government agencies and identifies areas of collaboration
- **Planning:** Adopting a global perspective in planning to develop strategic responses for a whole-of-government approach in collaboration with partner government agencies
- **Information:** Ensuring seamless flow of critical and timely information across the supply chain
- **People:** Enhancing human capital through effective training, job rotation and exposure to partner government agencies' work
- **Processes:** Involving customers, stakeholders and partners in the design of new facilitation schemes

⁴ The Computer Network that Saves Time, Jobs and S\$1B a Year, The Strait Times, 10 January 1995. The article cited Mr Robert Yap, managing director of Yap Chwee Hock Transport then, as saying "TradeNet has enabled us to halve the number of shipping clerks and clear the work comfortably within office hours. "You can say that it has doubled our productivity."

⁵ Spring Singapore, Business Excellence Initiative, <http://www.spring.gov.sg/qualitystandards/be/pages/business-excellence-initiative.aspx>

- **Customers:** Understanding customers' changing business needs and working with partner government agencies to co-create solutions better meet customers' needs
- **Results:** Continuous improvement to raise the bar and challenging ourselves to bring the organisation to greater heights

In line with its focus on organisational excellence, Singapore Customs builds on its collaboration with other government agencies in TradeNet into a holistic partnership among government agencies with Singapore Customs performing a coordinating role as a "one-stop shop" for trade-related issues, in the same way that TradeNet provided a one-stop interface for businesses to submit trade documentation to Government.

Singapore Customs' efforts was recognized in 2012 when Singapore Customs was presented with the Singapore Quality Award, the most prestigious award presented by SPRING Singapore conferred on organisations in Singapore for their attainment of world-class standards of performance excellence.

Future Developments

In 2013, Singapore Customs started work on re-inventing TradeNet as an update to its national trade infrastructure. This will be done through a study involving our partner government agencies and the private sector to bring about greater synergies across the supply chain in deepening the integration of Singapore's trade and logistics IT systems, processes

Germany: Coordinated Border Management between Border Guard and Customs administration

I. General Remarks

The German Customs Administration supports and practices a close cooperation between the different authorities working at the border. However, it endorses the view that each Member State should be able to choose a cooperation model taking into account its particularities in terms of organisational structures, competences, location etc.

In Germany the level of cooperation depends on different means of transport (via airport, seaports, land borders – see additional remarks).

The German Customs Administration prefers border management to focus on coordination rather than integration and therefore promotes the use of the expression “Coordinated Border Management” (CBM) instead of “Integrated Border Management” (IBM).

Our preference for CBM has to do with the particular role of the Customs Administration which is primarily a fiscal administration. While border guards focus on the cross-border movement of persons, customs is responsible for the control of goods with regard to fiscal as well as safety aspects. Customs may conduct inspections on behalf of other government agencies that have border regulatory responsibilities when the respective mandate is given by law and thus prevents the importation of illicit goods that may be controlled by other government agencies. The task to monitor the cross-border movement of goods as safety authority has, however, to be seen as an annex to the customs’ primary task to collect customs duties and taxes. As a fiscal administration, the customs’ work is not territorially limited to the borders but is exercised throughout the country.

Therefore, the tasks of our Customs Administration as a safety authority cannot be detached from its tasks as a fiscal authority and therefore should not be integrated in terms of an Integrated Border Management.

But if necessary for aspects of safety and security, information has to be exchanged between the other authorities working at the border according to and within the limits of the respective legal framework - in particular in terms of data protection and tax secrecy.

According to our view, a coordination of border management implies a strict separation of competences between border guards and customs on the one hand, but a comprehensive transfer of competences on the other hand for any first action at the border if necessary. This means that, for instance in the absence of the border guard for any first action at the border, a customs officer may fulfil the tasks of a border guard and vice versa.

For instance, until the Schengen accession of Switzerland the model of a comprehensive transfer of competences in the case of any first action had been successfully implemented at the German-Swiss border and has proved to particularly encourage officers to learn more about the other authority and to acquire skills allowing them to better cooperate with the respective other authority. This transfer of competences is based on Sect. 66 and 67 Federal Border Police Act.

Sect. 66 “Official Tasks of Customs Officers in the Areas of Responsibility of the Federal Border Police”

(1) The Federal Ministry of the Interior, in agreement with the Federal Ministry of Finance, may entrust customs officers with the discharge of tasks relating to the police control of transfrontier traffic (Sect. 2 (2) No 2) at individual border crossing points, if this facilitates the clearance of transfrontier passenger traffic.

(2) Where customs officers discharge tasks in line with Paragraph 1 above, they shall have the same powers as Federal Border Police officers. In this respect, they are subject to the supervisory control by the Federal Ministry of the Interior and the subordinate Federal Border Police authorities.

Sect. 67 “Official Tasks of Federal Border Police Officers in the Areas of Responsibility of the Customs Administration”

(1) The Federal Ministry of Finance, in agreement with the Federal Ministry of the Interior, may entrust Federal Border Police officers with the discharge of tasks relating to customs administration at individual border crossing points, if this facilitates the clearance of transfrontier passenger traffic.

(2) Where Federal Border Police officers discharge tasks in line with Paragraph 1 above, they shall have the same powers as Federal Customs officers. In this respect, they shall be subject to the supervisory control by the Federal Ministry of Finance and the subordinate customs offices.

The overall aim is to improve the border management and to increase the benefits to government and trade (e.g. more trade facilitation, higher safety/security and protection, using synergy effects between the authorities to reduce costs for equipment and human resources).

II. Additional Remarks

1. Checkpoints at the external border

Checkpoints at the external border in Germany refer mainly to airports and seaports.

1.1. Airports

According to Article 191 para. 1 and 2 Regulation (EU) No. 2454/93, hold baggage is checked only at the airport of the departure and the final arrival – that is, in a different way from border guards control.

For organizational reasons checks on persons must take place directly after entering any building of the first airport (arrival in a Schengen Member State) in order to allow fast transit to internal Schengen flights. Customs control (control of goods) focuses on hold baggage which must be checked close to the belts for incoming luggage. It could be discussed to merge control on persons with cabin baggage and money control (Article 194 para. 1 Regulation (EU) No. 2454/93), however for reasons of resources random checks are the rule. They should be carried out before the passengers are mixed with passengers of other airplanes (Article 195 Regulation (EU) No. 2454/93).

1.2. Seaports

At the seaports of the European Union, passenger ferries between Schengen Member States and third states being neither EU nor Schengen Member States are rare. For organizational reasons it would be difficult in German ports to introduce a one stop control for checks on persons as well as on freight. Due to specific risks in terms of prohibitions and restrictions (e.g. narcotics), this is particularly valid with regards to ferries running between Turkey and the EU or ferries running on the Black Sea.

2. Co-operation model

Some additional remarks regarding the co-operation model from the German customs' perspective:

2.1. Synchronised checks

Dog handlers working for customs are trained in a different way than dog handlers working for border guards, focussing on different purposes – except for sniffer dogs for explosives. When running checks, the teams (dog handler and dog) can not replace each other. Therefore, an integrated operational approach of border management with respect to such teams is not helpful, providing information about the availabilities is sufficient in order to enable the respective management to synchronise checks.

2.2. Training

Even though customs dog training serves different purposes than the one for border guard dogs cooperation with regards to the training with arms and self-defence is generally possible. However, the German Customs Administration does not support a standardized training and training scheme neither with regards to the above-mentioned education aspect nor in general.

Hong Kong, China: Road Cargo System (ROCARS)

In order to keep abreast with global, regional and national developments in moving towards electronic customs clearance and enable the industry stakeholders to submit electronic advance cargo information to Customs, Hong Kong Customs (HKC), with support from the government, developed a system, namely, “Road Cargo System” (ROCARS), for customs clearance of road cargoes at all LBCPs. The ROCARS was officially launched on 17 May 2010 and became mandatory on 17 November 2011.

At the technology level, the system was based on ISO/TS 1500-2:2004 (electronic business eXtensible Markup Language Message Service (ebMS)) and Public Key Infrastructure (PKI), etc., which are adopted for effective and efficient data exchange and system connections with the stakeholders, including Logistics Industry, e.g. shippers/freight forwarders, truck drivers, agents, etc.

The ROCARS aims to provide a seamless system for the movement and customs clearance of road cargoes for the purposes of trade facilitation and adequate risk profiling of the cargo consignment based on electronic advance cargo information.

Under the Import and Export (Electronic Cargo Information) Regulation, Chapter 60L of the Hong Kong Laws, a shipper or freight forwarder is required to provide a pre-defined set of cargo information to HKC electronically through ROCARS before the cargo consignment enters or leaves Hong Kong, China in a truck. All users of ROCARS must register with HKC before they can submit the relevant cargo information in ROCARS.

Description of the Practice

A shipper or a freight forwarder acting as a shipper is obliged to submit a pre-defined set of cargo information to HKC through ROCARS at most 14 days in advance or at least 30 minutes before the cargo consignment being imported from or exported to the Mainland China by truck. As an acknowledgement after successful submission of cargo information, ROCARS returns a “Customs Cargo Reference Number” (CCRN) for the cargo consignment to the shipper who should then pass it together with the cargo description to the relevant truck driver. No less than 30 minutes before the truck arriving at an LBCP, the truck driver should do the “bundling” through ROCARS (via the Internet or by phone) by providing the CCRN and his vehicle’s registration number to HKC. The ROCARS will then inform the truck driver the earliest time to cross the boundary.

Under ROCARS, officials of HKC can conduct risk profiling on every cargo consignment in advance for determining whether a truck needs to be attended for inspection. When the cross-boundary trucks arrive at the LBCPs, they are only required to stop at one kiosk for immigration and customs clearance. With the introduction of one-stop clearance process, the average clearance time is significantly reduced from 60 seconds to 20 seconds. All cross-boundary trucks, except those selected for inspection, enjoy seamless customs and immigration clearance at the land boundary under the ROCARS.

In this way, the ROCARS system enabled:

- Customs officers to conduct risk assessment on land cargo consignments based on the electronic advance cargo information
- Provide seamless single kiosk clearance at the land boundary to speedup cross-boundary road traffic
- Facilitate the introduction of one-stop customs clearance for inter-modal transshipment cargoes (for instance, land-to-air transshipment cargoes may normally be subject to customs clearance at either the land border control point (LBCP) or the airport, instead of both locations)
- Reuse the cargo information submitted to ROCARS for import/export customs declaration which can enhance data accuracy and save users' effort and time of inputting the common data in the trade declaration submission

Customs-Business Partnerships

HKC has established a liaison mechanism with the representatives of shippers, freight forwarders and truck drivers for exchanging operational views and comments on the ROCARS. Moreover, HKC has also launched an extensive publicity program and established outreach teams to assist the industry stakeholders to get used to the ROCARS. A website (www.rocars.gov.hk) has also been established to help the public to better understand the arrangement and benefits of the new system.

Canada: Collaboration between Canada Border Service Agency (CBSA) & Canada Post Corporation (CPC)

The rise of e-commerce has brought tremendous benefits to both retailers and consumers. Retailers can now access a global customer base through their websites and consumers can shop in the comfort of their own homes through the internet and receive their orders in their mailbox.

The increasing volumes of postal small packages pose challenges to Customs and other regulatory agencies that need to enforce against illicit or unsafe goods. The presence of “dark net” sites such as the “silk road anonymous marketplace”, offering illicit substances, weapons and pedophilic content for sale, and distributing them by post, further illustrated the complex and urgent need for action to keep the public safe.

The opportunities and risks posed by post are not lost on countries. In 2006, the CPC announced the Postal Transformation Project, a project to update infrastructure and systems used to process domestic and international mail. This project included upgrades to the International Mail Exchange Offices (Mail Centers) with the construction of a new facility in Vancouver and renovations to the Toronto and Montreal facilities.

Also included in the Postal Transformation Project, is an initiative to commence the exchange of electronic data on mail items with other postal administrations. This initiative creates an unprecedented opportunity for the CBSA to modernize its Postal Program as CBSA's postal processes at that time, developed in 1992, remained highly manual, was labor intensive and had not kept pace with increases in mail volumes and technological advances made in other areas of border management. Border Services Officers (BSOs) had to physically screen every mail item entering Canada to perform risk assessment and determine admissibility as well as manually assess applicable duties and taxes.

This process also does not leverage on existing CBSA enforcement databases, targeting systems and electronic lookout capabilities used in other entry modes to identify and interdict high-risk or prohibited goods entering Canada. In addition, the process results in the CBSA expending a disproportionate amount of time towards the function of assessing duties and taxes. This gap creates vulnerability in the CBSA's capacity to fully uphold its security mandate in this environment.

To ensure that both CBSA and CPC were able to meet the challenges and risks faced by their respective organizations in the area of postal imports, the CBSA and the CPC signed a Letter of Intent on December 1, 2010, outlining the agreement between both organizations to move forward with the Postal Modernization Initiative (PMI).

The CBSA end-state vision of the PMI is to align the Postal Program with other Agency programs that currently leverage advance electronic data in support of targeting and risk assessment principles, while also addressing the antiquated systems and infrastructure currently in place at the three CBSA International Mail Exchange Offices.

However, until such time that a CBSA Risk Assessment system is in place for the PMI, an interim state approach will be taken whereby BSOs will use a secure visual tool to view EDI data on mail items and make informed pre-arrival decisions for appropriate diversion within the Mail Centre flow.

As the U.S., Germany, and U.K represents approximately 70%-80% of the total mail volume and are equipped to send advance mail item information to Canada, the initial stages of the PMI will only include electronic data from these countries. However, several other countries have also expressed an interest in participating in the EDI exchange. India and China participated in a test trial in early 2011 and Australia and Russia have also expressed interest. Denmark, Israel, and France are also accepting data from Canada.

Improved Targeting and Risk Assessment

The availability of data in electronic form allows for greater possibilities in risk management through applying rules to automatically risk-assess the electronic data.

CBSA Officers then uses the results of the automated risk assessment processes to make pre-arrival decisions that are applied upon arrival of the mail item.

Hence, mail items where advanced information was available could be expeditiously dealt with. For mail items where no EDI was provided pre-arrival, explicit sorting rules will be applied upon arrival. To further speed up the process, conveyor belts with mechanized diversions are installed to promote continuous flow and reduce physical handling of mail items.

The conveyor belts facilitate the movement of mail items according to 4 operational areas:

1. Primary Quality Assurance – BSO will visually inspect mail items with EDI in support of a release free decision prior to release and have an opportunity to refer to secondary.
2. Primary – BSO main focus will be to visually inspect non-EDI mail items. Additional tools such as 6 sided images and a new workstation will be introduced to enhance inspection.
3. Primary In-Line X-ray – BSO will review images of mail items that are referred based on either a pre-arrival BSO decision or a decision from the Primary BSO.
4. Secondary Examination Area – Mail items referred to Secondary will be x-rayed within the flow to aid the BSO in the examination process. Secondary referrals will also include Enforcement/OGD mail items.

These improvements brought about through the Postal Modernization Initiative has allowed CBSA Officers at the mail centres to more readily focus their work and attention on the examination of higher risk and targeted mail shipments and through a data-centric and risk-based process that allows for more objective decision making.