CUSTOMS MODERNIZATION
HANDBOOK: APPLYING RISK MANAGEMENT IN THE CARGO PROCESSING ENVIRONMENT

July 2018

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Linda Wilcox-Daugherty, a senior independent consultant, researched and wrote the *Applying Risk Management in the Cargo Processing Environment* handbook, with contributions from Victoria Waite, Principal Associate, and Krista Barry, of Nathan Associates Inc. They developed this publication with guidance from the U.S. Agency for International Development, particularly the Bureau for Economic Growth, Education, and Environment (E3), under the Leadership in Public Financial Management II (LPFM II) task order.

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The past 15 years have produced many changes in implementation of risk management capabilities in the multilateral landscape of customs and other border control agencies. World Trade Organization (WTO) negotiations on trade facilitation were officially launched in 2004. The World Customs Organization’s (WCO) Revised Kyoto Convention (RKC) entered into force in February 2006, and the SAFE Framework of Standards to Secure and Facilitate Global Trade was issued in 2005, and updated in 2012. With the conclusion of the WTO’s Trade Facilitation Agreement (TFA) in 2013, and its entry into force in February 2017, implementation of risk management capabilities has increasingly been recognized as a key building block for comprehensive implementation of the TFA and engrained as core principles in the WCO RKC.

Between 2004 and 2011, the U.S. Agency for International Development (USAID) commissioned a series of handbooks designed to assist developing country customs administrations as they identify and implement customs modernization reforms based on international best practices. These handbooks include:

- Establishing and Implementing a Program Management Process
- Establishing and Implementing a Customs Integrity Program
- Establishing Risk Management/Cargo Selectivity Capability
- Authorized Economic Operators Handbook
- Post-clearance Audit Programs Handbook

These handbooks remain extremely relevant, however significant real-world progress has been made towards increasing transparency, streamlining and automating procedures, simplifying processes, and harmonizing standards, and this progress needs to be acknowledged. The global community has also learned quite a bit from customs and border agency regimes as they have evolved (or failed to evolve) to accommodate new technologies, strategic thinking, and increased globalization. In addition to new as well as existing implementation challenges, many countries are also now concerned that improved trade facilitation may result in a reduction of attention to the cross-border security component. Other challenges also persist in terms of moving cargo across borders in a cost efficient and timely manner, such as political will, distrust of technology, worries about loss of revenue, and corruption. These developments have encouraged USAID to issue this newest handbook, an addition to the existing series.

Risk management serves as the foundation for various trade facilitation activities at national borders, including post-clearance audit and authorized operator programs. Released in 2004, USAID’s Establishing Risk Management/Cargo Selectivity Capability handbook (“2004 handbook”) was part of a series produced to help developing countries facilitate
trade flows. The 2004 handbook emphasizes that the first steps in establishing Customs risk management must be personal commitment from senior management, followed by an extensive training program for mid-level managers and employees. Therefore, the 2004 handbook provides a general course of action for creating a specialized Risk Management Unit to manage a Customs administration’s cargo selectivity processes.

The 20-step plan of action to establish a Risk Management Unit includes institutional capacity building, such as the creation of an inter-agency Risk Management Committee; designating positions and responsibilities within the Risk Management Unit; developing an internal and external communications strategy; and recruiting and training of the Risk Management Unit staff. Upon completion of these capacity-building measures, the team can develop and then implement an effective risk management process, as detailed in steps 16 – 20 of the action plan.

The 2004 handbook also emphasizes the importance of political will within a government to enact reforms and the commitment of the Customs administration to encourage and measure trader compliance. This process includes a two-pronged approach towards compliance to a) encourage and reward compliant traders (e.g., providing them with faster processing or other preferential treatments), and b) identify, penalize, and train non-compliant traders.

Customs administrations should continue to use the 2004 handbook to create their own Risk Management Units or strengthen existing structures through clearly delineated staff functions and continuous training. Once this stage as been reached, Customs administrations may then apply this second handbook, which expands upon the final steps of the first and provides technical guidelines on establishing a systematic risk management process.
INTRODUCTION

“If you don’t know where you are going, any road can take you there.”
- Lewis Carroll, *Alice in Wonderland*, 1865

Border clearance procedures cover some of the most problematic and difficult to overcome multi-stakeholder interactions in international trade, including both Government-to-Government (G2G) and Government-to-Business Sector (G2B) relations. Modern border management is critical to the smooth flow of legitimate cargo and people, but is also responsible for safeguarding regulatory concerns, maintaining border security, and collecting and protecting revenue. This vital work needs to continue even as many countries implement reforms to streamline and automate the clearance process, moving away from 100 percent inspection of all goods by government actors at the border (customs, agriculture, health, border police).

Customs administrations and other border agencies are charged with a daunting range of tasks. As they seek to manage risk, a balance must be established between costs and benefits. It is clearly not cost-effective to address all risks equally, so empirical criteria are needed to determine what constitutes an acceptable or unacceptable level of risk. Even as their responsibilities increase, customs authorities must learn to do “more with less.” Effective risk management allows customs and other relevant border agencies to allocate resources to those inspections that pose the greatest risk, while rapidly clearing shipments undertaken by traders with a strong record of compliance.

To manage risk in today’s international climate of increased globalization and heightened security, they require regular access to vital information and intelligence on people and international cargo shipments, as well as commercial information from importers, exporters, customs brokers, carriers and others. Customs is responsible for accurate analysis of this information, and professional management of assigning risk treatments according to analysis outcomes. The application of risk management enhances the effectiveness and efficiency of customs business in collecting revenue and protecting society. It is extremely important that Customs administrations actively develop an effective framework to strategically manage risk.

This handbook aims to provide a comprehensive guide to developing an active risk analysis framework in the cargo processing environment. Customs administrations will learn how to implement risk management through a sustainable, systemic process that uses advanced techniques and technologies, applies independent assurance (i.e., internal and external scrutiny of risk management controls and techniques), and fosters an enabling environment. This handbook complements the 2004 USAID Customs Modernization Handbook, *Establishing Risk Management/Cargo Selectivity Capacity*, which focuses on Customs administrations ability to a) develop and implement a strategy for new units, and
b) strengthen and reinforce best practices for existing units. This handbook specifically expands upon steps 16 (Identifying and Prioritizing Risks), and 18 (Activating Cargo Selectivity).

Finally, this handbook is written with the understanding that there is a dedicated Risk Management Unit (RMU)/Customs Selectivity Management Team (CSMT), either newly formed or already in existence, within the country’s Customs administration. If such a unit/team does not yet exist, please refer back to the 2004 handbook for additional guidance.

**POLITICAL WILL – MANDATE AND COMMITMENT**

Trade facilitation reform and modernization depend upon an enabling environment of strong political support, knowledgeable program management, and institutionalized change management. This enabling environment requires a solid mandate and commitment at the highest levels of government as it involves interventions and activities across multiple spheres: legal and regulatory, organizational, technological, capacity, staffing, and even public/private partnerships. Since effective risk management represents a major change from the status quo, it requires commitment from all levels of management, and communication of the message throughout the organization. Political will from the highest levels is needed to change mindsets of officials whose focus has traditionally been on collecting revenue/hitting revenue targets and protecting against contraband, and to reward those who concentrate on implementing risk management as opposed to 100 percent inspections.

**WHY MANAGE RISK?**

Customs administrations and other relevant border agencies strive to manage risk at the borders for a variety of reasons:

- To focus limited resources on the highest risks.
- To facilitate movement of compliant goods and people.
- To maximize effective use of existing skills and experience.
- To improve regulatory controls.
- To get better results.

Customs must strike a balance between its primary objectives of facilitation and control. “Customs must simultaneously manage two risks – the potential failure to facilitate international trade and the potential for noncompliance with Customs laws” (and the resulting loss of revenue or failure to achieve mission requirements). The adoption of risk management principles can achieve this balance (see Figure 1).¹

Better understanding the characteristics of risk is important in terms of how a Customs administration will develop a strategy to manage that risk. For example, the risk may be at least partially unknown — by risk indicators, risk profiles, data analysis and it may change with time — as trade laws, importers, and industries change. Risks can range from acceptable to catastrophic. Acceptable risk is one with minimal consequence to Customs’ mission; it can be anticipated based on data analysis and multiple risk indicators; and, because of this, the risk can be manageable.

DEFINING RISK MANAGEMENT
Risk may be defined as any internal or external situation or event that has the potential to impact upon an agency, preventing the agency from successfully achieving its objectives, delivering its services, or carrying out priorities, projects, or events. For Customs administrations, risk is the chance of an event occurring that will adversely affect compliance with import and export requirements and the Customs Code or law.

Risk management is an organized methodology for continuously: 1) identifying and measuring the known or unknown risks, i.e., the known may be a trader with a history of non-compliance and the unknown may be first-time traders or infrequent traders; 2) selecting appropriate risk mitigation options related to treatment channel designation; and 3) tracking results to ensure successful risk reduction. Several organizations have provided basic definitions for risk management, as shown in Table 0.1. Appendix 1 provides a more detailed list of relevant terms and definitions.

Research conducted by the World Customs Organization (WCO) indicates that risk management often occurs in an ad hoc or intuitive manner, e.g., at the discretion of the Customs officer who may or may not be looking for a bribe, and is not consistently practiced in a systematic and structured way. To overcome the pitfalls of inconsistency and lack of communication indicated by this stove-piped or siloed approach, many Customs administrations are implementing a framework for managing risk that uses a more disciplined and structured methodology, and a logical, step-by-step approach to managing risk.

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3 WCO, RKC GA Guidelines On Customs Controls, 1999, p. 5.

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**TABLE 0.1 – DEFINING “RISK MANAGEMENT”**

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>DEFINITION</th>
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<tr>
<td><strong>WORLD CUSTOMS ORGANIZATION</strong></td>
<td>The systematic application of management procedures and practices providing Customs with the necessary information to address movements or consignments which present a risk.</td>
</tr>
<tr>
<td><strong>WORLD TRADE ORGANIZATION</strong></td>
<td>The systematic application of management procedures and practices providing Customs and other relevant border agencies with the necessary information in order to address movements or consignments which present a risk.</td>
</tr>
<tr>
<td><strong>U.S. Customs and Border Protection</strong></td>
<td>A proactive management technique that identifies processes for controlling risk in trade compliance.</td>
</tr>
<tr>
<td><strong>INTERNATIONAL ORGANIZATION FOR STANDARDIZATION 9001</strong></td>
<td>Coordinated activities to direct and control an organization with regard to risk.</td>
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Ultimately risk management is a process that enables Customs administrations (and other relevant border agencies) to identify and address important risks of non-compliance.4

**COMPLIANCE**

For any risk management process to be successful and effective, it must be constantly monitored and evaluated. The same can be said about trade compliance.

Historically (and even today), most Customs administrations have been more oriented toward detecting and penalizing non-compliance than in encouraging traders to comply with applicable laws and regulations. The modern Customs administration sets compliance goals, and then partners with traders to facilitate meeting those goals. Voluntarily compliant traders are rewarded with fewer examinations and/or less stringent controls, allowing government officials to focus on known non-compliant traders or businesses that do not have a compliance history (Box 0.1).

The modern approach favors the carrot (i.e., rewarding compliance) over the stick (i.e., punishing non-compliance). The stick should always be available to handle the worst-case scenarios, but the preferred method is a positive approach that improves working relationships and encourages voluntary compliance. The historical approach, with its threat of severe penalties for any discrepancy regardless of importance or culpability, does not promote compliance. Neither does examining 100 percent of cargo shipments (imports, exports or transit goods), nor do burdensome regulations or legal requirements. To the contrary, these approaches promote corruption by giving an unethical officer a means of intimidating the trader to negotiate the problem away.

In addition to risk management at the border, Customs administrations and other border authorities need to assess their performance during clearance of goods through a compliance measurement program. They develop a random sampling methodology or “roadmap” based on all types of risks, workload and infrastructure characteristics, and history of compliance. Random sampling and regular data quality reviews validate the accuracy of risk findings and allow adjustments to risk treatment. Some of the transaction processes to consider for compliance verifications include: goods declaration

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**Box 0.1 – Incentivizing Compliance**

1. **For Business:** When the cost of compliance is lower than the cost of non-compliance, businesses will be compliant.
2. **For Government:** Voluntary compliance is more effective and economical than non-voluntary or enforced compliance.
3. **For Government and Business:** You cannot enforce regulations or comply with regulations if you do not know the regulations.

compliance; trader compliance; broker, clearing agent or freight forwarder compliance; transit compliance; free zone or warehouse compliance; manifest and transport document compliance; transporter or carrier compliance; and revenue collection.

IMPLEMENTATION OF GOOD RISK MANAGEMENT PRACTICES
Risk-based compliance management starts with comprehensive legislation that acknowledges the respective operational responsibilities of government and private sector. This legislation should include regulations for electronic communication, sanctions for non-compliance, and provisions to break the nexus between physical movements and processing, reporting and revenue liability. It should also allow for flexible and tailored business solutions. This approach requires administrative arrangements for initiatives such as a focus on client service, education and awareness raising, technical assistance and advice, consultation and cooperation, publication of official rulings, and formal appeal mechanisms (Box 0.2).

A risk management framework is a set of components that provides the foundation and organizational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout the organization (Box 0.3). A risk management plan is a scheme within the risk management framework that specifies the approach, components, and resources to be applied to the administration of a risk-based compliance management regime in border control agencies.

When looking to develop the risk management framework, the Customs administration should consult USAID’s 2004 handbook to establish a framework and plan of action. Other elements are found in the WCO Risk Management Compendium, Revised Kyoto Convention (RKC), and the SAFE Framework. Links to the Compendium and Framework may be found in the References section; the RKC is in Appendix 2.

Box 0.2 – Case Study: Zambia’s Customs Compliance Strategy
In its Corporate Plan for 2013-2015, the Zambia Revenue Authority developed the following compliance strategy for its Customs division:

1. Facilitating Voluntary Compliance
2. Detecting and Assessing Sanctions on Non-Compliance
3. Understanding Customs Clients – Segmentation (By Stakeholder Shipments’ Volume/Value)
4. Application of an Escalatory Penalty System
5. Strengthening of Cargo Selectivity Risk Management
6. Strengthening of Inter-Agency Cooperation and Coordination

Box 0.3 – WCO Risk Management Framework
“Each Customs administration will need to establish its unique risk management policy, which will take into account its strategic goals and objectives with commensurate plans. The risk management policy statement should clearly outline the administration’s overall intentions and direction regarding risk management. Together, the risk management policy and an organizational risk management plan which specifies the approach, management components and resources to be applied to the management of risk.”


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\[1\] WCO, Risk Management Compendium, Volume 1, 2011
RISK MANAGEMENT STEERING COMMITTEE(S)

Step 1 in the 2004 handbook calls for establishing a Risk Management Committee to ensure representation across key Customs offices. Administrations that have successfully pursued a Customs modernization program have made change management a priority (Box 0.4). Failing to do so can lead to resistance to change, employee turnover, and overall lowered productivity. Common tactics that previous Customs administrations have used to manage the impacts of changing business processes and focuses are:

- Establish a strategic level steering committee composed of executive members of at least the Customs and Finance administrations, since issues of customs control, revenue, and trade facilitation will be central to a committee’s operation. Any agency that intends to be involved in joint risk assessment, inspection, or data sharing endeavors should also be represented.

- Established an operational level steering committee of knowledgeable Customs risk management and border agency managers with the authority to act immediately on time-sensitive intelligence. This committee should have obvious senior executive support and sponsorship, but managers should be empowered to drive legal, policy, and procedural changes throughout the organizations.

Box 0.4 – Case Study: Malawi's Risk Management Steering Committee

Through U.S. technical assistance in 2015, the Malawi Customs Risk Management and Intelligence Unit (RMIU) developed an operations manual that clearly states their Risk Management framework, strategy, and roles and responsibilities. Of particular note is the role of the Risk Management Steering Committee (RMSC), which was established as follows:

The committee is designated at headquarters level and reports directly to the Malawi Revenue Authority (MRA) Commissioner General. The responsibility of the RMSC is to oversee Risk Management activities within the Customs Division. In addition, it provides advice and guidance on RM [Risk Management] implementation, monitoring of activities and risk criteria in the system.

The RMSC is chaired by the Commissioner of Customs & Excise; committee members are drawn from sections within the Customs & Excise Division plus representatives of Domestic Tax and the Tax Investigations Division. The Risk Management Champion, with operational responsibility, is the Deputy Commissioner of Customs & Excise responsible for Operations. Overall, the Commissioner of Customs has a fundamental role to play in the management of risk in the MRA by ensuring that the tone for RM is vibrant within the division.
STAKEHOLDER CAPACITY BUILDING

Before Customs and other involved agencies can rightfully expect that importers, exporters and others in the trade community comply with their legal requirements and responsibilities, they should make certain that the traders understand what those requirements and responsibilities are. This information can be conveyed through seminars, informational notices, and websites.

In addition, Customs and other agencies should consider ways in which they can improve working relationships with high volume-high compliance traders. These can be done through seminars, face-to-face meetings, designated liaison officers, and incentives such as allowing direct delivery to the trusted traders’ premises, allowing consolidated or account-based declarations rather than transaction-based declarations.
SECTION 1: A HOLISTIC APPROACH TO RISK MANAGEMENT IN CARGO PROCESSING

A holistic approach to risk-based processes enables Customs administrations and Risk Management Units to respond effectively to expanding workloads owing to increased globalization and shifting government priorities, e.g., meeting obligations under multilateral agreements, while trying to balance commitments to maintain integrity and security. Effective risk management depends upon political will, a coordinated approach between government agencies and the private sector, capacity-building within Customs, data usage to identify compliance, and adoption of automated procedures.

Notions of risk can vary widely. Every organization seeking to adopt a holistic risk management approach must first define what risk means in its day-to-day mission (Box 1.1). Risk in Customs operations can depend upon many factors, including: national priorities, the frequency of certain violations encountered, and geographic proximity to particular types of threats. Customs administrations must identify and rank risks according to their level of concern for each, and only then can they begin the process of effectively directing available resources to counter these threats.

Box 1.1 – A Holistic Approach to Risk Management: New Zealand Customs
Under the robust New Zealand Customs risk management methodology, four types of thinking shape processes and tools:

- **Rigorous thinking** – ensuring that everyday decision-making is guided by logical, systematic processes.
- **Forward thinking** – managing proactively rather than reactively; identifying and being prepared for what can happen.
- **Responsible thinking** – taking action to manage risk, avoid or reduce adverse exposure, and maximize the potential of identified opportunities.
- **Balanced thinking** – striking a balance between the costs and benefits of managing risk; a risk-free environment is impossible (if not uneconomic) to achieve, so the administration needs to decide what level of risk is acceptable.

TRADITIONAL APPROACH VERSUS RISK-BASED APPROACH*
Cargo processing procedures need to adapt as international trade becomes increasingly complex. The traditional approaches of the 20th century, including 100 percent physical examinations and overlapping processes, must be modernized. The WCO 21st Century Roadmap lays out a framework to improve processes, balancing security issues with reduced regulatory burdens for import/export businesses. Widespread use of technology and automation can further help Customs administrations implement a more risk-based approach. Table 1.1 on page 11 contrasts traditional approaches to customs management with a more modern, risk-based focus.

*Adapted From Widdowson, WCO Risk Management Handbook.
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<tr>
<th>TRADITIONAL APPROACH</th>
<th>RISK-BASED APPROACH</th>
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<tr>
<td><strong>Redundant and overlapping processes</strong></td>
<td>Automation, coordination, and simplified and transparent procedures</td>
</tr>
<tr>
<td>This approach can include multiple single windows, multiple risk analysts or compliance officers, generally with a lack of coordination between headquarters and the border offices, and between the Customs and other border agencies.</td>
<td>Under coordinated single window processing, border agencies coordinate their requirements and enforcement activities, eliminating unnecessary redundancies and paperwork. This approach can also reduce delays, costs and unethical behavior at the border.</td>
</tr>
<tr>
<td><strong>All cargo examined</strong></td>
<td><strong>Selective examinations</strong></td>
</tr>
<tr>
<td>Cursory examinations under 100 percent examinations result in unreliable/misleading results, and a false sense of security. Unreliable data makes risk management and analysis difficult, so risk analysts cannot recognize patterns. Customs has minimal ability to adjust and no coherent strategy.</td>
<td>Risk management allows the type and intensity of the treatment to be tailored to the nature and complexity of the cargo. Overall, fewer examinations are conducted, but since border examination officers receive detailed risk treatment instructions from HQ, examinations are more thorough and the results are accurately reported into the IT system for analysis.</td>
</tr>
<tr>
<td><strong>Low levels of compliance (both trader and Customs)</strong></td>
<td><strong>Compliance orientation</strong></td>
</tr>
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<td>Because everything is examined, examinations are inadequate, serve little purpose to the Government, and are an expensive inconvenience to traders. This approach leads to traders looking for shortcuts to reduce delays and cut costs, such as bribes to a Customs examining officer to have cargo expedited or to pay less in legitimate duties and taxes. The trader or his representative and the Customs officer may negotiate a non-compliant arrangement favorable to them both, or the Customs officer can use administrative penalties to coerce bribes.</td>
<td>The focus of Customs shifts from identifying and punishing non-compliance to establishing compliance goals, encouraging and assisting traders to meet them, and measuring compliance levels. Customs recognizes that administrative penalties are a tool best used only when truly warranted. Customs compliance officers monitor the administration's performance based on compliance levels and cost effectiveness.</td>
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<tr>
<td><strong>Lack of respect</strong></td>
<td><strong>Customs-Trade partnerships</strong></td>
</tr>
<tr>
<td>Traders pay bribes because they perceive that doing so is in their best interest. Customs officers justify accepting or demanding bribes. There is little mutual respect.</td>
<td>Customs builds better relationships with its importers, exporters, brokers and trade associations. Customs encourages voluntary compliance and rewards those who demonstrate an ability to follow the law.</td>
</tr>
<tr>
<td><strong>Added costs damage the economy</strong></td>
<td><strong>Mutual Benefits</strong></td>
</tr>
<tr>
<td>Unnecessary delays and unethical behavior by Customs officers and importers, exporters, and their representatives result in additional costs that are passed to the domestic consumer. Higher costs contribute to a lower standard of living and a tendency to import goods that are both low in quality and in price to the importer. In addition, they discourage foreign investment in domestic businesses and the workforce.</td>
<td>Improved management processes simplify Customs organization-al objectives and dedicate resources to high-risk transactions. The Risk Management Unit has access to better data to detect non-compliance. Decreased physical examinations result in fewer delays and lower cost to legitimate traders, increasing facilitation, foreign investment, and GDP.</td>
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PARTNER GOVERNMENT AGENCIES INVOLVED IN CARGO PROCESSING

Partner Government Agencies (PGAs), also referred to as Other Government Agencies (OGAs) or Ministries Departments and Agencies (MDAs), often share responsibility with Customs for protecting the health, safety and well-being of people and the environment. PGAs should be included in risk management processes to facilitate trade and implement cargo selectivity. It is easy for a PGA to become so absorbed in their specific responsibilities that sometimes they lose sight of the bigger picture. The challenge, as Customs administrations institutionalize risk management, is to determine how to better coordinate with PGAs on how risk analysis can be applied to PGA controls to improve compliance and facilitate legitimate trade (Box 1.2).

COMPLIANT VERSUS NON-COMPLIANT TRADERS

Customs administrations need a reliable methodology to determine traders’ compliance. The first step is to identify major industry sectors and primary import or export commodity lines. Customs then applies a system of compliance examinations that typically focuses for a short time on only one sector or commodity line at a time to develop a statistically valid sample from which to calculate current compliance rates.

Once the Customs administration has determined the current compliance rates, it can determine compliance goals and formulate action plans to achieve them. Action plans typically include targeted compliance audits to determine the reasons for lower-than-acceptable compliance rates.
IMPLEMENTATION OF SYSTEMIC RISK MANAGEMENT PROCESS

Risk management requires capacity building throughout the organization so that risk analysts are able to understand, appreciate and make effective use of the process.

Information technology is essential to this process. It enables rapid analysis of selectivity criteria via a shared national database on transactions and cargo movements. Officers can easily update the database and distribute relevant risk data. An automated system can subject Customs declarations to a series of selectivity filters to determine a recommended risk level and treatment. Four selectivity filters can be applied: international, national, regional, and local profiles (plus random selection for each).

The automated system needs to be flexible and capable of handling both simple single data elements, risk indicators, and relatively complicated combinations of data elements. The use of international standards in data and messaging for export, import and transit reduces costs and redundancy, and is a core element of single window processing. Use of the WCO Data Model ensures compatibility and interoperability as applicable, across nations Government to government (G2G), Government to Business (G2B), and Business to Business (B2B).
SECTION 2: SYSTEMATIC RISK MANAGEMENT PROCESS

“Adopting a common, continuous and systematic risk management process provides a standard methodology for implementing risk management in practice. The process is a cyclic methodology with well-defined steps that support better decision making by providing insight into risks and their impact, outlining the common foundation for management decisions regarding the allocation of resources and prioritizing treatment actions. It is important that the risk management process be applied at all levels of the administration.”

- WCO Risk Management Compendium (Volume 1)

There are essentially six key phases in creating a systematic risk management process. The first five phases are to establish context, then identify, analyze, evaluate, and mitigate risks. Stakeholders should continuously consult and communicate throughout each step, monitoring and reporting results on an on-going basis (see Figure 2 above). This section of the handbook addresses all six of those phases.

Within the Risk Management Unit, the risk management process is executed by the Cargo Selectivity Analysis Team (CSMT), although definitions and roles may be adjusted to fit staffing and resources. The suggested unit is composed of a Chief (Head/Director/Manager), Risk Analysts, Information and Communications Technology (ICT) Specialists, and a Compliance Specialist. Complete descriptions of these positions may be found in the 2004 handbook.
PHASE 1: ESTABLISHING THE CONTEXT

Context is the setting or place and the circumstances in which risk management occurs; for example, imports, exports, transit, or seaport, airport, land border and the strategic and organizational objectives. Risks arise from events that occur both outside and inside a Customs administration. To understand and treat risks effectively, the Customs Risk Management Unit and key representatives of Customs operational and support units (such as Investigations, Enforcement, Human Resources and Training, Classification, Valuation, and Quality Assurance) must assess external and internal environments, and the risks they generate.

Internally generated risks can potentially include inadequate facilities, lack of tools, complicated procedures, and confusing instructions. Corruption within the ranks is also a key internal risk. This can result in situations such as officers who are unable to do their jobs correctly (due to, for example, a lack of training), and officers who do not want to do their jobs correctly (that is, corruption). There are many types of external risks as well including: smuggling contraband, other criminal activity, or declaration errors such as merchandise undervaluation, misclassification, incorrect application of preferences or restrictions, or wrong country of origin. These weaknesses all pose risk and require a decision on the effective treatment.

Other risks are vulnerabilities created by requirements to support PGA mission goals, such as: public health guidelines that prevent the import of unapproved drugs; sanitary or phytosanitary measures to safeguard food products; environmental protections; and endangered and protected species (CITES). Changes brought about by multilateral agreements can also pose risks. For example, a Customs administration that has historically focused on revenue collection may see its priorities shift (or proliferate) due to free trade agreements, trade facilitation, and supply chain security conditions. Changes in the external environment create new challenges.
HOW TO ESTABLISH THE CONTEXT?

When establishing the context, a Risk Management Unit must consider a number of essential factors, including the needs and expectations of internal and external stakeholders, as well as the potential impact of internal and external environments, such as personnel, training, infrastructure, technology, and security. To understand and treat risks, the operational context, both internal and external, can be established by utilizing various assessment tools and techniques and answering the following questions:

**Internal environment**

- What are the customs administration’s goals and structure? (Box 2.1)
- If risk management is targeting a specific process or activity, what capabilities and resources are available to manage that process or activity?
- What criteria are used to assess risks and determine if intervention is needed?
- What are the scope and limits of risk management? Is it national, government-wide, or limited to the customs administration?

**External environment**

- What goods or people are involved?
- If imported goods are being rated for risk, is there a domestic industry that could be affected by the ratings? Are the goods subject to specific laws, controls, or duties?
- What are the expectations of stakeholders such as the government, affected communities, and trade and other agencies?
- What is the social, political, and cultural situation?
- What is known about the country of origin and that country’s trade environment?
- What other details are known about the process or activity?

**TECHNIQUE TO ESTABLISH CONTEXT**

SWOT Analysis: One common method of establishing the context and defining the most relevant risks is via an operational self-assessment of an administration’s history, future goals, and stakeholder expectations. Every Customs administration has unique strengths, weaknesses, opportunities, and threats (SWOT).

- **Strengths:** Attributes of the organization helpful to achieving objectives.
- **Weaknesses:** Attributes of the organization harmful to achieving objectives.
- **Opportunities:** External conditions helpful to achieving objectives.
- **Threats:** External conditions that could endanger achieving objectives.
There are several assessment tools available to inform Customs SWOT evaluations, including the USAID TCBaseline Customs Assessment tool, the WCO SAFE Framework of Standards Self-Assessment Checklist, and U.S. Customs and Border Protection C-TPAT’s Five Step Risk Assessment. A sample SWOT Analysis Matrix is included in Appendix 3.

As part of the Phase I Establishing the context, Customs must also identify Key Performance Indicators (KPIs) to measure risk management impact. All KPIs should originate from critical operational priorities, such as revenue collection or community protection, and each requires clear targets or benchmarks, and period. Trade facilitation is often a critical operational priority. The United Nations has defined it by the following four principles:

- **Transparency** within government promotes openness and accountability of a government’s and Customs administration’s actions. It entails stakeholder and public access to disclosed information and participation in policymaking. This information may include laws, regulations and administrative decisions of general application, budgets, procurement decisions and meetings.
- **Simplification** eliminates unnecessary elements and duplications in trade formalities, processes and procedures.
- **Standardization** adopts internationally agreed-upon formats for practices and procedures, documents and information.
- **Harmonization** aligns national procedures, operations, and documents with international conventions, standards, and practices.

**IMPACT OF RESOURCES ON THE CONTEXT**
A Customs administration needs adequate resources, technical competencies, and procedures to meet critical operational priorities. What does a Customs administration do when there is row upon row of cargo containers, long lines of vehicular traffic, and a pile up of perishable goods at national ports of entry?

Lacking an effective strategy to manage ever-increasing volumes of trade, the above scenario has become reality for many Customs administrations around the world. Most Customs administrations cannot afford to increase staff and enlarge facilities. By identifying low- and high-risk shipments, risk management processes direct resources where they will have the greatest impact (Box 2.2 on page 18). The dilemma of increasing workload and stagnant or diminishing resources has a direct impact on the risk management process. Risk Management Units are unlikely to wield much influence over decision-makers who allocate Customs limited resources.

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On the other hand, Risk Management Units can influence the workload at cargo clearance offices through their ability and responsibility to control the selectivity examination rates. It is critical that each risk analyst be aware of staffing and facility constraints at each cargo clearance office, and the resulting maximum effective throughput.

Technical processes and guidelines in Customs are often complex, as any Customs officer can attest who has ever needed to apply the WTO Agreement on Customs Valuation or classify goods under the harmonized system. Not every Customs officer can be an expert in these technical areas. Often, officers with relevant knowledge and skills are not organizationally or physically close to those officers making valuation and classification decisions. Lack of knowledge and lack of immediate access to an expert tends to result in incorrect or arbitrary decisions. The absence of a competent Customs post-clearance audit department to conduct post-importation verification makes it impossible to determine compliance. This absence of reliable data can negatively impact Customs’ ability to implement an effective risk management-based cargo selectivity program.

Complex procedures and weak instructions increase delays and costs, and also contribute to internal risk. A productive Customs administration takes a business-like approach to cost-effectiveness. For example, Customs administrations should measure effectiveness of cargo examinations in terms of the ratio of significant discrepancies to total examinations, and then calculate a return on investment (i.e., economic costs of discrepancy versus revenue impact of discrepancy). The results can then be analyzed and evaluated, with recommendations made to either adjust the cargo selectivity criteria or the percentage of examinations.

**Box 2.2 – Case Study: Impact Of Non-Risk-Based Scanning**

The following results come from a country that disregarded this risk management approach for cargo examinations:

- At three locations, 60 percent of arriving trucks (51,000) were randomly referred to be scanned. Of the 51,000 scanned shipments, only 78 discrepancies were reported.
- In this specific country, the average time to scan a shipment is 5 minutes. Since there was one scanner that operated a maximum of eight hours a day, they cleared a maximum of 12 trucks per hour, or 96 trucks per workday. The average wait time per truck to be scanned was over 2 days.
- Non-risk-based scanning, without considering the impact on workload, infrastructure capacity, and results, caused significant processing delays. The additional revenue collected was far less than the economic cost of the delays.

**Source:** Data from Customs annual report in Sub-Saharan African country; personal experience of author.
PHASE 2: IDENTIFY THE RISK – DEFINING RISK CRITERIA AND PARAMETERS FOR RISK ASSESSMENT

Good data are essential to risk identification. Under the risk management system, risk analysts, compliance specialists, and IT specialists collect data and information from available relevant sources, including Customs’ declaration processing system’s database, the intelligence unit, the investigations unit, the post clearance audit unit, and field offices. Once data have been methodically analyzed and assessed in terms of risk, it becomes the basis for future actions, such as determining examination criteria for the automated declaration processing system’s selectivity module, and identifying targets for a post–clearance audit unit. The compliance officer monitors the results of examinations and audits, and uses this information to validate criteria on an ongoing basis.

Many Customs administrations have collective, informal opinions of high-risk commodities, traders, shippers, brokers and clearing agents, country of origin, etc. It is important to note, however, that these “opinions” are not supported by evidence. Often, compliant traders are assigned to the same control treatment as the non-compliant, and high- and low-risk cargo are treated the same.

The more risk indicators that support a risk profile, the clearer the risk criteria will be. A risk analyst identifies risk indicators using data from the Customs declaration, manifest, Bill of Lading, prior compliance history, and other methods discussed below. Risk levels can be based on country of origin, valuation, and classification description, among other indicators. For example, a risk analyst may consider as low-risk imported medication from a known German manufacturer with a history of compliance, while an infrequent importer of the same type of medication from a high-risk country, with unknown internal controls and no compliance history, could be considered high risk. Therefore, it is critical to identify potential risks that could have significant consequences for the organization’s priority mission requirements.
Methods to identify risks include brainstorming, diagramming root cause and effect, and process mapping.

- **Brainstorming** draws on the knowledge and creative capacity of the participants. The group can include a mix of the risk management team at headquarters, examination officers in the field, and, if applicable, partner government agencies. Brainstorming provides perspective on national, regional, and local threats.

- **Cause and Effect Relationship** can be used as a tool during brainstorming and includes utilizing a “Five Whys” technique that asks “why” until there are no more answers. Using Phase 1 information of establishing the Context, the Situation is explained, Cause is the “why” something happens, and the Effect is the “what happens.” For example:
  - **Situation** – Assume that an importer of textiles suddenly uses a new supplier.

- **Process Mapping** creates a flowchart view of elements involved in the import, export, and transit processes from purchase order generation to accounts payable. The process map is a graphical depiction of a process across company locations, operations, divisions and business units, highlighting opportunities for risk. Process mapping to formally flowchart internal controls is also a useful risk management tool, as it can identify interdependencies between activities, and find disconnects in the process that represent risk.
PHASE 3: ANALYZING THE RISK – LIKELIHOOD X CONSEQUENCE

The risk analyst will calculate risk as an equation \( \text{Risk} = L \times C \) of the Likelihood of non-compliance occurring multiplied by the Consequence or impact of the non-compliance on Customs or PGA mission requirements (Box 2.3). The risk equation is based on sources as diverse as:

- Historical analysis, data collection, past impact and accuracy of risk profiles, and root causes.
- Predictive analysis, future impact based on data and creation of risk profiles, and the probability of the risk event.
- Information and intelligence from:
  - Information sources, such as trade associations, importers, exporters, carriers, brokers, other internal divisions (Domestic Tax, Investigations), and partner foreign Customs administrations
  - Risk Indicators – specific criteria that can be used to target high-risk cargo, conveyances, companies, or persons
- Risk estimation of qualitative and/or quantitative factors including:
  - Import value claimed
  - Use of preferential trade programs and savings
  - Market size and importance to the importer or exporter
  - Duty paid
  - Location of facilities and particular jurisdictional sensitivities/requirements
  - Level of staffing and organization
  - Written procedures and record keeping
  - Operational adherence to written procedures
  - Import process steps and internal controls
  - Knowledge level of personnel involved in export/import function
  - Compliance history
  - History of penalties or identified errors
  - Audit history

**Box 2.3 – Examples of Analyzing the Risk**
If the risk is Loss of Revenue, the following areas need to have data collected and evaluated:
- Opportunities for fraud
- Incompetent/untrained staff
- Lack of standard operating procedures
- Trader capacity
- Misclassification
- Undervaluation

**RISK INDICATORS**

Risk indicators are specific criteria that, when taken together, can be used to identify high-risk cargo, conveyances or persons. An indicator is something visible or evident such as incorrect, vague or inadequate description of goods that may endanger Customs objectives, such as loss of revenue. In analyzing the risk, each indicator is evaluated on a separate matrix, with the control treatment then based on the highest calculation. The key point is that all risk indicators should be considered together. Every field on a Customs Declaration can be a risk indicator. However, the WCO recommends a broader risk management methodology taking
data from cargo manifests, bills of lading, and other supporting documents. An illustrative list of potential risk indicators is located in Appendix 4.

**PHASE 4: EVALUATE THE RISK – RISK EVALUATION AND PRIORITIZATION**

Upon completion of the first three phases, the Customs risk analyst must evaluate the risk using a matrix developed by the Risk Management Unit.

**BUILDING A RISK EVALUATION MATRIX**

The risk analyst assesses the severity of each potential risk by its probability and consequences (Box 2.4). A standard risk evaluation matrix to evaluate risk assessment findings facilitates a common understanding of program risks at all levels of management. The final risk evaluation matrix goes through a two-step process that first defines the likelihood and probability levels, and second defines the consequence levels. This process enables risks to be classified as in terms of intensity – high, medium or acceptable. Acceptable risks are usually those with minimal consequence. This matrix allows risks of different types to be systematically ranked relative to one another (Table 2.1).

For example, the risk analyst may score a potential health risk, a potential financial risk, and a potential environmental risk on the matrix and rank them relative to one another even though the impacts are markedly different.

**Box 2.4 – Examples of Evaluating the Risk**

If a certain commodity is of “Country X” origin, or is considered restricted or prohibited merchandise, or has high likelihood and consequence levels for fraud, the tariff number and Country of Origin Country X will be targeted, and criteria written to reflect the risk.

Given the same example, if the manufacturer, importer, clearing agent, and/or carrier are considered to be non-compliant, the selectivity criteria will be written to reflect these additional risk indicators.

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>DESCRIPTION</th>
<th>PROBABILITY OF OCCURRENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improbable</td>
<td>~ 10%</td>
</tr>
<tr>
<td>2</td>
<td>Low Probability</td>
<td>~ 30%</td>
</tr>
<tr>
<td>3</td>
<td>Probable</td>
<td>~ 50%</td>
</tr>
<tr>
<td>4</td>
<td>Highly Probable</td>
<td>~ 70%</td>
</tr>
<tr>
<td>5</td>
<td>Near Certainty</td>
<td>~ 90%</td>
</tr>
</tbody>
</table>

A probability level describes how likely it is that a risk will occur and cause the defined consequences. The probability percentages on Table 2.1 above are examples of common
definitions, however individual country circumstances may require adjusting the percentage. For example, level 5, near certainty, may be 95 percent or more and improbable, level 1, less than 5 percent depending on the country specific probability levels.

Defining consequence levels is more challenging since each agency has multiple critical operational responsibilities, each of which carries its own risks. Table 2.2 below, provides examples of consequence level definitions for a Customs administration whose critical operational responsibilities include:

- Protecting society/security.
- Protecting economic interests/provision of accurate trade statistics.
- Efficient collection of revenue.
- Maintaining a reputation for professionalism and integrity.
- Trade facilitation.

When analyzing the consequences of a risk event, an analyst should consider the level of impact in relation to each of the consequence categories defined in the Consequence Level Table, above. For example, a given risk may present a very high negative consequence (5) on Maintaining Customs Professionalism (i.e., lost reputation and image), a moderate consequence (3) on Collecting Revenue (i.e., financial loss), and offer little or no impact in other areas. Both the 3 and 5 ratings may be recorded, but the overall level of risk calculation is based on the highest value. In this example, it would be the high impact on Maintaining Customs Professionalism (5 – Catastrophic).

Only the Consequence Categories that are relevant to the specific risk should be considered. Therefore, not every Consequence Category is rated for each risk, as they are not applicable.

**RISK EVALUATION MATRIX**

Once consequence level definitions are finalized, the next step is for the risk analyst to construct a risk evaluation matrix tailored to the specific Customs administration. While this matrix does not specify the various consequence definitions due to space constraints, the consequence levels referred to in the matrix are those defined in Table 2.2. Note that the determination of acceptable, moderate and high-risk shown in Table 2.3, is subject to management discretion based on recommendations from the Risk Management Unit Chief, and approval by the Risk Management Steering Committee.

By plotting probability and consequence, an analyst can consistently determine the risk intensity or level of risk. Each risk is first analyzed and evaluated in terms of the potential consequences resulting from a particular risk scenario. Then the consequence of this scenario, with the associated level of probability, is rated. Using 1 to 5 scales for Consequence and
These are examples of a country’s critical operational responsibilities. It is only an illustrative list. Each Customs administration will need to determine its own mission-critical responsibilities including trade facilitation.

<table>
<thead>
<tr>
<th>CRITICAL OPERATIONAL RESPONSIBILITY10</th>
<th>INSIGNIFICANT</th>
<th>MINOR 2</th>
<th>MODERATE 3</th>
<th>MAJOR 4</th>
<th>CATASTROPHIC 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Facilitation</td>
<td>No or insignificant impact</td>
<td>Uncertainty of policy and procedures</td>
<td>Increased delays and costs</td>
<td>Low levels of compliance</td>
<td>Lack of IT Systems interoperability Failure</td>
</tr>
<tr>
<td>Protecting Society/Security</td>
<td>No readily quantifiable widespread impact</td>
<td>Issues relating to product safety, requirements</td>
<td>Minor injuries or illnesses requiring medical treatment or localized harm to the environment</td>
<td>Localized destruction of property, serious injuries or illnesses requiring hospitalization or serious environmental damage</td>
<td>Widespread destruction of property, loss of life, terrorist act, or widespread environmental damage</td>
</tr>
<tr>
<td>Protecting Economic Interests/ Accurate Trade Statistics</td>
<td>Routine Customs Trade meetings are adequate to prevent escalation</td>
<td>Increased business complaints, decreasing compliance levels</td>
<td>Small to medium businesses placed at competitive disadvantage</td>
<td>Major industries placed at competitive disadvantage</td>
<td>Major industries significantly affected, closures, etc.</td>
</tr>
<tr>
<td>Efficient Collection Revenue</td>
<td>$1,000 potential annual loss of revenue</td>
<td>$5,000 potential annual loss of revenue</td>
<td>$25,000 potential annual loss of revenue</td>
<td>$100,000 potential annual loss of revenue</td>
<td>$500,000 potential annual loss of revenue</td>
</tr>
<tr>
<td>Maintaining Customs Professionalism</td>
<td>Routine Customs internal checks are adequate to prevent escalation</td>
<td>Scrutiny required by internal committee or internal audit to prevent escalation</td>
<td>Scrutiny required by external auditors or commission</td>
<td>Intense public, political and media scrutiny; front page headlines, TV, etc.</td>
<td>Assembly inquiry or Commission of Inquiry</td>
</tr>
</tbody>
</table>

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10 These are examples of a country’s critical operational responsibilities. It is only an illustrative list. Each Customs administration will need to determine its own mission-critical responsibilities including trade facilitation.
Probability results in a Level of Risk ranging from 1 to 25. For example, an importer may have a historical record of high levels of non-compliance (5), however the consequence is minor (2). The equation would be $5 \times 2 = 10$. The risk level is 10, which falls in the Moderate range. Management can then make a decision as to the resources that should be dedicated to treating this moderate risk.

If the same importer uses the services of a Customs broker who is suspected of substituting false invoices to reduce the fees owed and the impact falls within the moderate consequence level (estimated at $25,000 from the chart above), then Risk would be calculated as Likelihood

### TABLE 2.3 - RISK EVALUATION MATRIX

<table>
<thead>
<tr>
<th>PROBABILITY/LIKELIHOOD</th>
<th>Insignificant 1</th>
<th>Minor 2</th>
<th>Moderate 3</th>
<th>Major 4</th>
<th>Catastrophic 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>4, 31 – 50%</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>1, 11 – 30%</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1, 31 – 50%</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1, 41 – 89%</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1, 90% or more</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Risk Intensity

- **Acceptable = 1 – 5**
- **Moderate = 6 – 12**
- **High = 15 – 25**

Probability results in a Level of Risk ranging from 1 to 25. For example, an importer may have a historical record of high levels of non-compliance (5), however the consequence is minor (2). The equation would be $5 \times 2 = 10$. The risk level is 10, which falls in the Moderate range. Management can then make a decision as to the resources that should be dedicated to treating this moderate risk.

If the same importer uses the services of a Customs broker who is suspected of substituting false invoices to reduce the fees owed and the impact falls within the moderate consequence level (estimated at $25,000 from the chart above), then Risk would be calculated as Likelihood.
5 ("Almost Certain") x 3 (Moderate Consequence) = Risk level of 15 (5 x 3 = 15). This result falls in the high-risk range. Since the risk is higher when the risk indicator of the Customs broker is included, the risk treatment will be based on the high risk of 15.

**PHASE 5: MITIGATE (TREAT) THE RISK – THE FOUR T’S OF RISK TREATMENT**

Once the analyst has identified the risk, gathered the necessary data to perform a proper analysis, and used the risk evaluation matrix to arrive at the risk level, the next step is to plan the appropriate risk mitigation action. In doing so, the analyst should consider the effectiveness of current organizational response to risks of this type to avoid repeating less-than-effective control treatments. Similarly, the Risk Management Unit Chief should evaluate the cost-benefit and resource allocation of any newly proposed controls. The Chief should then make recommendations to the Risk Management Committee, which determines whether the investment justify the return.

Should the assessed level of risk be unacceptable, then the Risk Management Unit may put in place additional controls, or improve existing controls in the form of treatments. Consideration should be given to:

- Prevention options, such as capacity building and increased awareness (internal and external), clear operating procedures, facility infrastructure, and monitoring reports.
- Mitigation options that select the most effective and cost efficient control treatment channel that best reduces the consequence of the risk and achieve compliance.
- Selection of the least restrictive and burdensome measure.

The Four T’s of Risk Treatment are: Tolerate, Treat, Transfer, and Terminate. These Four T’s provide varied actions that Risk Management officers may recommend to the Unit Chief following the risk assessment.

**1. TOLERATE**

Customs can tolerate a risk if:

- The cost of control is greater than the benefit (i.e., risk severity is acceptable);
- Capacity building or standard operating procedures will mitigate the risk; and/or,
- Through monitoring for any change, and control through random examinations or Post Clearance Audit (PCA), the risk is mitigated.

**2. TREAT**

Determine the intensity of the treatment: assign the lowest treatment application necessary to effectively mitigate the risk without overburdening the Customs workforce performing document reviews at the border or at examination facilities. Officers should adjust the level of targeting treatment sufficient to achieve satisfactory compliance. Channels may vary
as designated in the Customs administration’s automated declaration processing system. Treating the risk is the most common option to reduce the likelihood and consequence of identified risks through assignment to channels (See Box 2.5 on page 29).

- **Green Channel** – Release with no physical intervention or document review. A high percentage of low-risk shipments should be assigned to green channel, and a reasonable random selection percentage to green channel assigned to medium and high-risk shipments.

- **Yellow Channel** – Review of declaration and supporting documentation based on risk assessment. Usually reserved for verification of Country of Origin claims, invoices/value determinations, licensing/permits, and PGA requirements.

- **Red Channel** – Requires physical examination of cargo (may include conveyance) and/or scanning, a type of non-intrusive examination. Please note that goods assigned to the Red Channel should include specific examination criterion with instructions for the examining officer that consider any impact on workload (i.e., whether there are sufficient staff and facility infrastructure capacity to perform the number of physical examinations). Red channel should be reserved for: shipments identified as high risk; and for those imports where there is little risk data such as for first-time importers; and on a limited random basis as part of a compliance measurement program. As with any other tool, a physical examination is ineffective if not used properly. Examination officers must report results, whether positive or negative, to the Risk Management Unit. Red channel should not be 100%.

- **Blue Channel** – Referred for Post Clearance Audit (PCA) as an extension of Customs Control.\(^1\) Should be a means of selective control for low-risk traders or trusted (AEO) traders. PCA is particularly effective because it gives a clear picture of the transaction through the importer’s own records. The cargo is released but the declaration is referred to the PCA or Post Importation Verification team for subsequent review of the importer’s records relating to the shipment, as well as to similar shipments. PCA is not a fiscal audit and should not be used as an opportunity to generate additional revenue. Non-compliance discovered as a result of PCA is an opportunity to assist the importer to improve compliance with minimal financial impact on the importer.

\(^1\)For more information, see the USAID handbook, *Customs Modernization: Post-Clearance Audit Programs*, 2011.
TARGETING THE RISK

Targeting is the pre-identification of declarations, operations procedures, individuals, or transactions to be verified based on information or intelligence, visible external criteria, or control plans.\(^{12}\)

It is essential to select the correct targeting elements to determine the best treatment option. The best targeting elements are those that address enforcement concerns but do not unfairly delay the release of any cargo, or improperly or ineffectively deploy Customs personnel. Two basic steps help with this selection process, as follows:

- Research, analyze and evaluate the potential risk indicators (the companies, commodities or countries), and select the combination most likely to target non-compliant transactions.

- Perform an impact assessment against the combination of risk indicators used to target non-compliant shipments.

The combination of risk indicators is called the risk profile. The more elements you are able to include in the profile, the more effective that profile will be. The following demonstrate simple examples of elements to target (before taking into consideration the potential impact on workload):

- If a company is suspected of being a terrorist front organization and Customs determines to examine everything they import, the consignee would be targeted without regard to tariff, country, or other data elements.

- If a certain commodity is considered restricted or prohibited merchandise from a specific country of origin, then Customs would target the tariff number and the specific country.

- If a foreign manufacturer or importer has a record of intellectual property right violations, then Customs would almost certainly want to target the manufacturer for Intellectual Property Right violations.

\(^{12}\) World Bank Guidelines For Risk Management In Customs (2005)
3. TRANSFER
When significant attempts to evade Customs laws are discovered as a result of a physical examination or post clearance audit, Customs administrations must have the legal capacity and trained personnel to conduct formal investigations to determine if criminal prosecution is warranted and, if so, how best to proceed.

Customs may transfer the cargo declaration to an appropriate internal or external third party for mitigation or investigation. For example, if the cause is lack of training and training is the responsibility of human resources, the risk could be transferred from the Risk Management Unit to human resources, or if the risk is systems-related, it could be transferred to Office of Information Technology (OIT). External transfer may also be to another PGA or trade association.

4. TERMINATE
Once the risk analyst has identified the cause of the risk and determined the consequence, the analyst must make a decision on whether the cause can be eliminated. For example, suppose a Customs department works with independent contractors who select containers for scanning and conduct the scanning. Suppose also that Customs does not observe the scanning or review the images, and selection for scanning is not based on approved risk criteria. This situation creates multiple significant risks. These risks can be terminated if Customs supervises the scanning, bases the selection of containers for scanning on an approved risk assessment, and reviews the scanned images. Table 2.4 on page 31 describes the risk evaluation process.
### TABLE 2.4 - RISK EVALUATION PROCESS

<table>
<thead>
<tr>
<th>STEP</th>
<th>DESCRIPTION</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Risk analyst determines the appropriate treatment type.</td>
<td>• The most effective strategy may call for a combination of treatments: i.e., physical examination and document review, or immediate release and PCA.</td>
</tr>
<tr>
<td>2</td>
<td>Risk analyst determines the intensity.</td>
<td>• Assign the lowest treatment application intensity needed to effectively mitigate the risk without overburdening the workforce.</td>
</tr>
<tr>
<td>3</td>
<td>Risk analyst writes examination criteria with instructions for the examining officer.</td>
<td>• Examination criteria should tie directly to the risk and guide the officer’s actions during the examination.</td>
</tr>
<tr>
<td>4</td>
<td>Once the risk analyst has determined an appropriate treatment, the analyst and Unit Chief must determine how often to apply the treatment. The Steering Committee will need to approve complex situations.</td>
<td>• Define satisfactory compliance. As per Table 2.1, this compliance level should be pegged to risk intensity and does not always have to be 100%. 10? 20? 50? 100? • Consider the impact on workload and whether examining officers can realistically accomplish their assignments. • Examination stations should not be overloaded. Quality is more important than quantity.</td>
</tr>
<tr>
<td>5</td>
<td>IT specialist assists the risk analyst with writing selectivity criteria and inputting into declaration processing system.</td>
<td>• Fewer well-designed criteria are better than many poor ones. • Good criteria give better results. • Good criteria and clear results enhance credibility.</td>
</tr>
</tbody>
</table>

**Remember the options: treatment and intensity. Physical examination should not be the first choice.**

### CARRYING OUT TREATMENT

<table>
<thead>
<tr>
<th>STEP</th>
<th>DESCRIPTION</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Risk analyst instructs the examination officer who will be conducting the control.</td>
<td>Instructions should be based on the risk assessment and direct the examination officer to the specific risk. Examples include: • “Socks imported at 402(b) value but quantity regularly understated.” • “Check markings on camera and lens for inconsistent Country of Origin.” • “Known violator of Intellectual Property Rights goods. Check database.” • “Verify county of origin markings.” • “Importer has previously under declared quantities; verify count.”</td>
</tr>
<tr>
<td>2</td>
<td>Trained officers conduct examinations in the field using well-established standards.</td>
<td>The importance of the following two actions must be impressed upon all managers and examining officers: • A quality examination is conducted in a thorough and systematic matter, according to defined examination guidelines and specific examinations instructions. • All results (whether positive or negative) are reported through an automated system to the risk management team for analysis. • Examining officers must be trained in the new requirements and understand that these requirements are mandatory.</td>
</tr>
<tr>
<td>3</td>
<td>The examining officer creates an examination report and saves it in the declaration processing system for retrieval by the Risk Management Unit.</td>
<td>There is two-way communications between the analyst and the examining officer. The analyst tells the officer what to look for and why, and the officer tells the analyst how he conducted the control and what he found. Common elements are: • Discrepancy type • Change actions • Basis or law • Loss of revenue • Officer’s comments • Action taken</td>
</tr>
</tbody>
</table>
PHASE 6: MONITOR AND REPORT

Risk analysts need to monitor and review risk treatments on either a monthly or quarterly basis to ensure they are fully and correctly implemented. In the processing system, risk analysts should create and maintain a file that includes all data on a specific risk profile, including history, background information, original and any follow-up analyses, changes or deletions, and copies of all earlier versions of the profile.

Customs risk analysts and examination officers must monitor and report on the following:

- Examinations – By location, by officer, by comparative effectiveness.
- Results – Seizures and penalties, increased collections, negative examinations.
- Compliance rates – Changes and fluctuations.

Risk analysts must also continuously monitor selectivity criteria hits and track results. Effectiveness of criteria is based on these measurements. The Risk Management Unit needs to continuously report to the Risk Management Steering Committee to allow for timely and effective decisions, and to track the success of risk mitigation initiatives. The Unit can use monitoring and reporting for:

- Improving or deleting ineffective criteria, or amending the risk profile if specific problem(s) are identified.
- Bringing traders into compliance if they receive numerous violations during risk treatment.
- Revising criteria, including reduction of treatment intensity or possible elimination, if frequent negative results encountered during risk treatment.

CONSULT, COMMUNICATE, AND DOCUMENT

Consultation and communication are essential elements of risk management. They are critical at every step to ensure that all the participants understand, are involved in, and contribute to the process. Risk management requires continuous feedback at all levels, especially from the examining officer to the risk analyst. Consultation is a process that uses communication to make effective decisions. It gives both internal and external stakeholders the opportunity to influence decisions, and provides an effective way to receive useful input, ensuring that all relevant viewpoints are taken into account as the process identifies and evaluates risk. Documentation preserves those decisions for the future, and facilitates analysis of these new approaches.
Risk documentation is absolutely essential for current, as well as future, projects. It consists of recording, maintaining and reporting risk management plans, assessments, and handling information. It also includes recording the results of risk management activities, providing a knowledge base for better risk management in later stages of the project and in other projects. Documentation should include as a minimum the following information: risk management plans; project metrics to be used for risk management; identified risks and their descriptions; the probability, severity of impact, and prioritization of all known risks; a description of risk handling options selected for implementation, performance assessment results; and a record of all changes to the above documentation, including newly identified risks and plan changes.

For additional materials on the risk management process, see Appendix 5: Suggested Standard Risk Management Profile, Appendix 6: Developing Selectivity Criteria, and Appendix 7: Risk Evaluation Example.
SECTION 3: RISK MANAGEMENT TECHNIQUES

“A central risk management unit and/or a risk assessment/targeting center is often responsible for information collation and analysis, and for the assessment of raw information. The resulting evaluation in an operational context provides risk indicators and profiles for goods, people, means of transport and economic operators.”

- WCO Risk Management Compendium (Volume 1)

To be successful, risk assessment and management require the availability of accurate and meaningful qualitative and quantitative data for analysis. Objective and subjective data elements can each provide important risk indicators for Customs administrations, other border agencies and companies, including:

- Import value
- Duties paid
- Duties avoided through preference claims
- Product flows and supply chains
- Written procedures and record-keeping (e.g., company standard operating procedures)
- Operational adherence to written procedures
- Import process steps and internal controls
- Personnel conducting import function
- Penalty history
- Audit history

As the international trading system becomes more interconnected, Customs administrations need to employ all available techniques and technologies for robust data collection. To facilitate data collection, Customs administrations have developed automated declaration processing systems, or adopted internationally-developed platforms such as the UNCTAD Automated System for Customs Data (ASYCUDA). Within each system, Customs and the IT service provider must activate the risk management module, which will help store the cargo selectivity criteria developed in Section 2.

The risk management techniques and tools in this section can further help Customs administrations as they identify risk (Phase 2), and monitor and report on risk treatment results (Phase 6). Since many of the declaration processing systems include fees, each Customs administration must identify priority areas and work with the systems provider
to incorporate the tools into their processing system for seamless interoperability. Many of the WCO tools may be accessed through the WCO website or by contacting the WCO liaison within your administration. The following explanations of risk management tools and techniques are illustrative of the types of information and systems available to the risk analyst. Effective and accurate data collection is critical to the holistic risk management approach and data should be constantly monitored, evaluated, and new processing systems explored as they become available.

INTELLIGENCE

Intelligence is a fundamental building block for an effective risk-based cargo selectivity approach. Customs-to-Customs (G2G) and Customs-to-Business (G2B) sharing and exchange of internal and external sources of information are important. Naturally, in Customs administrations there is always an international element to trade since one country’s import is another country’s export. When the importing country suspects import fraud, the exporting country may have essential information regarding the transaction. Therefore, maintaining good relationships and liaising with international Customs colleagues on both a formal and informal basis can provide huge benefits. International instruments, including the recently ratified WTO TFA Article 8 (Border Agency Coordination) and Article 12 (Customs Cooperation), have codified this practice to encourage greater implementation and integration. Furthermore, the WCO provides various instruments to increase exchange of intelligence information within trading regions, including the network of Regional Intelligence Liaison Offices (RILOs) and the Customs Enforcement Network (CEN) database. The CEN collects global data on seizures and offenses, and has photo analysis capabilities to combat trafficking of illicit goods. Customs administrations should actively engage with their designated RILO to stay updated with additional tools and intelligence information.¹³

Furthermore, intelligence units within the Customs administration can enhance the national risk management framework. These units should work closely with the Risk Management Unit to communicate risks and input this information into the automated declaration processing systems.

WCO CARGO TARGETING SYSTEM (CTS)

A targeting system can further support the risk treatment decision of the Customs officer or analyst. As such, the targeting system serves as a decision support system. The WCO CTS is available to enable its members to implement risk management according to the RKC and SAFE Framework of Standards.¹⁴


¹⁴For more information, see https://ten.wcoomd.org/products/cargo-targeting-system-cts.
MIRROR ANALYSIS
Identifying fraudulent and therefore high-risk shipments is a fundamental component of risk selectivity criteria. The mirror analysis technique compares data on Country A’s imports, such as quantity, value and weight, to data on exports from countries that trade with Country A. By analyzing the differences between countries’ records, mirror statistics can help Customs administrations approximate the quantity and location of fraud, which can then be used to refine primary risk criteria in the automated processing system. However, limits of the mirror analysis method can include a lack of updated data and discrepancies in data due to other reasons, such as incorrect or erroneous tariff classifications, declarations, or currency conversions, or “terms of trade” differences between countries that provide no direct comparison between the export and import value.15

WCO TIME RELEASE STUDY (TRS)
Customs administrations and international partners may implement WCO Time Release Study methodologies to measure the standard processing times for clearance and release of goods by Customs and other border agencies. Importantly, successive studies can reveal changes over time. Implemented risk management procedures can yield faster processing speeds, build trust between Customs and traders, and attract new international business. In addition, the study can provide critical feedback to Customs and other border agencies for corrective actions to improve risk management.

WCO DATA MODEL (WCO DM)
As countries develop Single Window portals to enhance trade facilitation (TFA Article 10.4), the WCO Data Model may be incorporated to harmonize data that Customs and other PGAs require from traders. Risk management is enhanced as the critical data needed to perform a risk assessment can be met by a single submission. The model also encourages data sharing and further communication between border agencies. The benefits of using the WCO DM for cross border data exchange are as follows:

• Data can be submitted once and reused in many different business processes;
• Data collection and validation processes are simplified;
• Applications can be developed according to one single data exchange standard and unified modeling language such as UN/EDIFACT.

DATA ANALYSIS
Data analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. Customs administrations leverage data on a day-to-day basis to fulfill most operational requirements. As such, data analysis is essential for encouraging compliance, and contributes to overarching objectives of border protection, trade facilitation, and the collection of both revenue and trade statistics.

DATA MINING

“Data mining can be defined as the application of the scientific method, including statistical analysis, to large amounts of data to uncover valuable information from that data. It can often detect patterns in data that cannot be recognized manually, as well as make predictive estimates of preferred outcomes, such as the likelihood of a declaration containing errors.”

Data mining and analytics can help micro-target specific higher-risk cargo from large shipments (Box 3.1). This methodology includes the collection of readily available public data outside the normal Customs collection, for example, international sources and databases of other PGAs such as the Revenue Authority. Because the quality of the data may not be as verifiable, Customs should use this data to identify larger patterns or potential risk indicators, instead of definite risks. Data quality matters because cargo should not be unfairly targeted. Unlocking this potential source of big data requires both investment to train high-potential data analysts, and capacity-building within the wider administration.

COGNITIVE COMPUTING SYSTEMS (AUTOMATED SELECTIVITY RULES)

Data Analytics, including automated selectivity rules, has become an increasingly important tool for Customs administrations. However, conventional data analytics has some critical limitations because it can only look for pre-defined patterns and rules, and cannot make use of unstructured data, which comes in the form of emails, social media, blogs, documents, images, and videos. As noted by the WCO, cognitive computing allows Customs to extract insights from both structured and unstructured data. Using these insights for risk analysis, leads to the discovery of new patterns, the creation of specific selectivity rules, the ability to capture and expand on the experiences of top performers, and to improve the quality and consistency of risk treatment decision-making.

Box 3.1 – Case Study: Peru’s Use Of Algorithms As Data Mining Tool

With technical assistance from U.S. Customs and Border Protection, Peru implemented an algorithmic approach to risk management consisting of an automated analysis of cluster data from different connected automated sources, as well as different perspectives and rules. The automated analysis of collected data from multiple sources significantly sped up the risk management process and ensured data accuracy and integrity.

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CONCLUSION

Customs administrations must lead a coalition of border agency partners and the trading community to modernize cargo processing for the 21st century international economy. Reforms require political will. Government leaders must commit to a break with outdated and inefficient habits, traditions and processes. Leaders must implement strong accountability mechanisms to discourage corruption within the ranks, and train middle managers to provide oversight across headquarters and field offices. As the world continues to integrate, traders and consumers can all greatly benefit from these improvements: transparent, simplified and risk-based cargo processing.

The WTO Trade Facilitation Agreement’s Article 7.4 establishes effective risk management of goods as a necessary pillar for trade facilitation in any country. Implementing a risk-based cargo processing system provides developing countries with linkages to other customs modernization and trade facilitation reforms, including Post-Clearance Audit (Article 7.5), Authorized Economic Operators (Article 7.7), National Single Window (Article 10.4), Pre-Arrival Processing (Article 7.1), and Border Agency Cooperation (Article 8). As Customs administrations seek to make important changes to their risk management system, Time Release Studies (TRS) conducted using WCO methodologies present an opportunity to establish baseline measurements against which the success of new initiatives and trade facilitation can be gauged.

The 2004 handbook provides guidance in implementing the necessary operational and organizational changes within Customs administrations, which may be extended to broader government processes as border operations become more coordinated. The 20-step plan of action concentrates on building the institutional capacity necessary for a functioning Risk Management Unit. This second handbook takes the established Risk Management Unit and trains it in the technical application of risk management. By developing the necessary analytical capacity, this handbook gives Customs officers the confidence to implement a sophisticated risk management policy and interact dynamically with automated processing systems.
REFERENCES


APPENDIX I: RISK MANAGEMENT GLOSSARY

AUDIT BASED CONTROLS: Measures by which Customs satisfy themselves as to the accuracy of declarations through the examination of relevant books, records, business systems and commercial data held by the persons concerned. Also known as Post Clearance Audit.

CRITICAL OPERATIONAL REQUIREMENTS: The most important requirements that the organization must meet to satisfy its stakeholders.

COMPLIANCE ORIENTATION: A proactive approach to encouraging compliance with Customs and related laws. If Customs officers perceive that their primary responsibility is to find discrepancies, they tend to assume that every trader is a potential violator. Officers may then concentrate on proving guilt, or worse, may view the perceived dishonesty of traders as a fertile source of supplementary personal income for themselves. With this perspective, Customs tends to overlook an entire range of activities that can significantly enhance both productivity and compliance. By contrast, if Customs’ perspective is that its primary interest is to improve compliance, additional options focused on compliance become available. A two-pronged approach is required for a cargo selectivity program to be fully effective. First, Customs must actively encourage traders to comply with laws and requirements. Second, Customs must improve its capability to identify and correct those traders that do not. Even though its primary goal should be to improve compliance levels, Customs must always maintain an effective enforcement capability, demonstrating its ability to identify and deal appropriately with willful or repetitively negligent non-compliance.

COMPLIANCE MEASUREMENT: A phrase used when statistically valid random sampling techniques are used to determine the degree to which traders, carriers, imported goods, and other variables conform to Customs rules and procedures. When designed in a systematic and appropriate manner, compliance measurement can be used as a diagnostic tool to identify areas of non-compliance.

CONSEQUENCE: The outcome of an event or situation expressed qualitatively or quantitatively, being a loss, injury, disadvantage, or gain.

CONTROL: Customs Control is defined in the WCO Glossary of Customs terms as “Measures applied to ensure compliance with the laws and regulation which Customs is responsible for enforcing.” As a more generic definition applicable to all agencies with commercial import and export responsibilities, these are measures applied to ensure compliance with the laws and regulations which the agency is responsible for enforcing.
INFORMED COMPLIANCE: Many Customs administrations have instituted a program of informed compliance wherein officers assist traders and industries to understand and apply the trade rules, and to improve their internal company procedures to comply with import and export requirements.

INTENSITY: Intensity is the extent to which a risk treatment is applied in terms of percentages. The risk management approach is to assign the appropriate type of treatment at the lowest intensity necessary to effectively mitigate the risk without overburdening the workforce.

POST CLEARANCE CONTROLS: See Audit-Based Controls.

RISK: “Risk is the degree of exposure to the chance of non-compliance which would result in loss or injury to trade, industry or the public.” – USCS Trade Compliance Risk Management Process Handbook.


“Risk can be defined as the chance of something happening that may have an impact on objectives.” – Australian Customs Risk Management Policy (2003).

“Risk is the chance of an event occurring that will adversely affect compliance with … import and export laws in either the travelers and commercial environments. Risk is measured in terms of probability, magnitude and the materiality of the loss or injury.” – Canada Customs Compliance Improvement Plan 2002-2003.

Note: At least two international standards organizations have expanded their definition of consequences to include “positive” results. The following two examples demonstrate the “positive consequence” approach:

“Risk can be defined as the combination of the probability of an event and its consequences. In all types of undertaking, there is the potential for events and consequences that constitute opportunities for benefit (upside) or threats to success (downside).” – ISO/IEC Guide 73 (2009).

“Risk is the possibility of something happening that impacts on your objectives. It is the chance to either make a gain or a loss. It is measured in terms of likelihood and consequence.” – Australia/New Zealand Standard for Risk Management (AS/NZS 4360) (2004).

RISK ANALYSIS: Risk Analysis is the process of examining each risk to refine the risk description, isolate the cause, quantify the probability of occurrence, and determine the nature and impact of possible effects. The result of this process is a list of risks rated and prioritized according to their probability of occurrence, severity of impact, and relationship to other risk areas. – U.S. General Services Administration Acquisition Manual Acquisition Manual (GSAM) Condensed Handbook, chapter 5 (2003).

“Risk analysis is the systematic use of available information to determine how often defined risks may occur and the magnitude of their likely consequences.” – WCO Risk Management Handbook (2004).

RISK CHARACTERISTICS
- Risk is at least partially unknown.
- Risk changes with time — as trade laws, importers, and industries change.
- Some risks are worse than others: risk ranges from acceptable to catastrophic.
- Risk can be anticipated.
- Because it can be anticipated, risk is manageable.

RISK COMPONENTS: The two components of risk are likelihood or probability, and consequence. Breaking risk down into its two primary components allows us to formulate a mathematical definition of risk: Risk equals Probability times Consequence. This mathematical equation will allow us to quantify various risks and rank them in relative importance or “risk severity.” Quantifying and ranking risks enables risk managers to know which risks to address first, and to evaluate how much effort is reasonable to eliminate or reduce the probability or consequence of risk.

RISK EVALUATION: When the risk analysis process has been completed, it is necessary to compare the estimated risks against risk criteria which the organization has established. The risk criteria may include associated costs and benefits, legal requirements, socioeconomic and environmental factors, and concerns of stakeholders. Risk evaluation, therefore, is used to make decisions about the significance of risks to the organization and whether each specific risk should be accepted or treated. – Association of Insurance and Risk Managers (AIRMIC) Risk Management Standard (2002).

RISK IDENTIFICATION: Identifies an organization’s exposure to uncertainty. This requires an intimate knowledge of the organization, the market in which it operates, the legal, social, political and cultural environment in which it exists, as well as the development of a sound understanding of its strategic and operational objectives, including factors critical to its success and the threats and opportunities related to the achievement of these objectives.
The following methods are often used to identify possible risks: Brainstorming, evaluations or inputs from project stakeholders, periodic reviews of project data, questionnaires, interviews, analysis of historical data. – Federation of European Risk Management Associations (FERMA) Risk Management Standards.

**RISK INDICATORS:** Specific criteria which, when taken together, serve as a practical tool to select and target movements for the potential of non-compliance with Customs law. Risk indicators are specified selectivity criteria such as: specific commodity code, country of origin, country whence consigned, licensing indicator, value, trader, level of compliance, type of means of transport, purpose of the stay in the Customs territory, financial consequences, or financial situation of the trader/person. – WCO Risk Management Handbook (2004).

**RISK MANAGEMENT:** “The systematic application of management procedures and practices which provide Customs with the necessary information to address movements or consignments which present a risk.” – WCO Risk Management Handbook (2004).

Risk management is a proactive management technique that identifies processes for controlling risk in trade compliance. Risk management is a method of managing that concentrates on identifying and controlling events that have the potential to cause significant problems. In Customs trade terms, that means identifying those imports that represent the greatest risk of non-compliance so that we can focus our resources in those areas. – USCS Trade Compliance Risk Management Process Handbook.

Risk Management is the systematic application of management procedures and practices providing Customs with the necessary information to address movements or consignments which present a risk. This focus is necessary since the fundamental task of the Customs is to control the movements or consignments across national frontiers and ensure compliance with national laws. When adopted as a management philosophy it enables the Customs to not only carry out its key responsibilities effectively but also organize its resources and deploy them in a manner so as to improve its overall performance.

“Risk management is the culture, processes, and structures that are directed towards the effective management of potential opportunities and adverse effects.” – Australia/New Zealand Standard for Risk Management (AS/NZS 4360) (2004).

“Risk Management is a systematic method of identifying, evaluating, analyzing and controlling potentially adverse events and consequences as well as identifying and taking action on opportunities that may exist.” – Canada Customs Compliance Improvement Plan 2002-2003.
Risk assessment is that part of risk management which provides a structured process that identifies how objectives may be affected, and analyses the risk in term of consequences and their probabilities before deciding on whether further treatment is required. Risk management includes the application of logical and systematic methods for communicating and consulting throughout this process; establishing the context for identifying, analyzing, evaluating, treating risk associated with any activity, process, function or product; monitoring and reviewing risks; reporting and recording the results appropriately. – ISO/IEC/FDIS 31010 (2009).

Risk Management is increasingly recognized as being concerned with both positive and negative aspects of risk. Therefore, this standard considers risk from both perspectives. In the safety field, it is generally recognized that consequences are only negative and therefore the management of safety risk is focused on prevention and mitigation of harm. – ISO/IEC Guide 73 (2009).

Effective risk management requires a reporting and review structure to ensure that risks are effectively identified and assessed, and that appropriate controls and responses are in place. Regular audits of policy and standards compliance should be carried out and standards performance reviewed to identify opportunities for improvement. It should be remembered that organizations are dynamic and operate in dynamic environments. Changes in the organization and the environment in which it operates must be identified and appropriate modifications made to systems. The monitoring process should provide assurance that there are appropriate controls in place for the organization’s activities and that the procedures are understood and followed. – Association of Insurance and Risk Managers (AIRMIC) Risk Management Standard (2002).

**RISK MATRIX:** A risk matrix is an assessment model using risk probability and consequence levels in a matrix format to determine a level of risk severity in a disciplined, logical and consistent manner. Once risks have been defined, with probability of occurrence and consequences assigned, the risk can be rated as to its severity. This process facilitates prioritizing risks and deciding what level of resources to devote to the risk.

**RISK MITIGATION:** See Risk Reduction.

**RISK MONITORING:** The process of continually tracking risks and the effectiveness of risk handling options to ensure risk conditions do not get out of control. This is done by knowing the baseline risk management plans, understanding the risks and risk handling
options, establishing meaningful metrics, and evaluating project performance against
the established metrics, plans, and expected results throughout the acquisition process.
Continual monitoring also enables the identification of new risks that may become apparent
over time. It also discovers the interrelationships between various risks. The monitoring
process provides feedback into all other activities to improve the ongoing, iterative risk
management process for the current and future projects. – *U.S. General Services Administration

**RISK PROFILE:** “A predetermined combination of risk indicators, based on information
which has been gathered, analyzed and categorized.” – *WCO Risk Management Handbook*
(2004).

**RISK REDUCTION:** “A selective application of appropriate techniques and management
principles to reduce either likelihood of an occurrence or its consequences or both.” –

**RISK SEVERITY:** Risk Severity equals Likelihood or Probability of Occurrence times
Consequence or Potential Impact if the risk occurs.

**RISK TREATMENT:** “Risk treatment is the process of selecting and implementing measures
to modify the risk. Risk treatment includes as its major element, risk control/mitigation, but
extends further to, for example, risk avoidance, risk transfer, and risk financing.” – *Federation
of European Risk Management Associations (FERMA) Risk Management Standards*.

Risk treatment employs options that reduce the risk itself, such as changing current
conditions, requirements or procedures to lessen the probability of occurrence, as well as
applying the type of control deemed most appropriate to detect and counter risks where
the probability is high, in order to reduce the negative impact to the project if the risk
condition should occur. Types of risk treatments vary according to the type of risk. The
intensity of risk treatment varies according to the severity of the risk.

**SELECTIVITY:** “The application of risk profiles to declarations, operations, individuals, or

**SELECTIVITY CHANNELS**
- **Red channel** means mandatory physical examination. It is usually better to carry out
  a full documentary check before the physical examination, as this check will reveal
  the anomalies in the declaration, and what to look for during the examination. The
  computerized risk management system can also describe the reasons for selection,
  but experience shows that an examining officer is more effective if he has done some
desk work prior to the examination. Red channel does not systematically imply a
complete examination of the entire consignment. It is quite acceptable to do only a detailed examination of a small part. This will be determined by the judgment of the examining officer and can be supported by directions either provided by the risk management system, or through the documentary review process. There should always be an examination report, irrespective of the findings of the examination.

- **Yellow channel** means a documentary check. The system picked up some anomalies in the declaration elements, and further checking is required. After a documentary check, the declaration can either be released or sent to the red channel. Here also, the system can indicate the elements of the declaration that need to be checked and the type of physical examination that may be carried out if necessary.

- **Green channel** means immediate release without a check. In a perfect world, the release note can be issued as soon as the duties are paid. However, there are systems where the release is delayed, allowing Customs some time to recall the declaration and carry out a rapid check. This operation is not recommended in countries where it was difficult to sell the concept of risk management, as it may well result in annihilating the green channel principle (i.e., all declarations will continue to undergo a documentary check).

- **Blue channel** means immediate release through the automated vetting process built into the automated declaration processing system without a Customs officer reviewing documents or examining cargo. In blue channel, however, the declaration is automatically referred for PCA during which specialized Customs officers can review a wider variety of documentation concerns.


**TARGETING:** “The pre-identification of operations declarations, operations, individuals, or transactions to be verified based on information or intelligence, visible external criteria, or control plans.” – *World Bank Guidelines for Risk Management in Customs* (2005).
APPENDIX 2: REVISED KYOTO CONVENTION – CORE PRINCIPLES AND BENEFITS

BACKGROUND


1999 – Revision of the original Convention to provide for updates to keep abreast of developments in information technology and in Customs techniques.

The Revised Kyoto Convention (RKC) serves as a blueprint of modern Customs procedures for Governments to implement effective controls and facilitate legitimate trade. The revised Convention calls for the World’s Customs authorities to provide:

• Standard simplified procedures
• Continuous development and improvement of Customs control techniques
• Maximum use of information technology
• A partnership approach between Customs and Trade

KEY PRINCIPLES

1. TRANSPARENCY AND PREDICTABILITY
   • Rules for providing information (making information on Customs requirements, laws, rules and regulations easily available)
   • Clear and transparent appeal procedures
   • Customs, independent authority, judicial

2. STANDARDIZATION AND SIMPLIFICATION OF GOODS DECLARATION AND SUPPORTING DOCUMENTS
   • Minimum data requirements
   • Submission by electronic means
   • Customs Data Model (supporting initiative)

3. “FAST TRACK” PROCEDURES FOR AUTHORIZED PERSONS WITH GOOD COMPLIANCE RECORDS
   • Release of goods with minimum information to identify goods (with later declaration)

4. MAXIMUM USE OF INFORMATION TECHNOLOGY
   • Use of international standards
   • Consultation with all relevant parties in introduction of computer application
   • Electronic commerce methods as an alternative to paper-based requirements
   • E-commerce strategy (supporting initiative)
5. MINIMUM NECESSARY CONTROL TO ENSURE COMPLIANCE

6. RISK MANAGEMENT
   • Identify high-risk consignments based on risk analysis (intelligence)
   • Shift from all documentary, physical check to selected check
   • Facilitation of legitimate trade while maintaining effective control
   • Effective and efficient deployment of Customs resources

7. AUDIT-BASED CONTROLS

8. COORDINATED INTERVENTIONS WITH OTHER AGENCIES (SINGLE WINDOW CONCEPT)

9. PARTNERSHIPS WITH THE TRADE
   • Formal consultative relationships
   • Information dissemination
   • Memoranda of Understanding (MOU)

RISK MANAGEMENT IN RKC

The RKC contains three standards specific to risk management:
   • Standard 6.3: “In the application of Customs control, the Customs SHALL use risk management.”
   • Standard 6.4: “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.”
   • Standard 6.5: “The Customs SHALL adopt a compliance measurement strategy to support risk management.”

BENEFITS

1. TRADE COMMUNITY
   • Faster, predictable and efficient Customs clearance
   • Transparent procedures and appeals procedures
   • Greater facilitation for compliant traders
   • Lower business costs
   • Enhanced competitiveness
   • Use of information technology
2. NATIONAL ECONOMY

- Reduce transaction costs and avoidance of delays in the release and clearance process
- Increase economic competitiveness
- Attract foreign direct investment and promote the development of industry
- Increase the participation of small and medium-sized enterprises
- Lower costs to consumers
- Increase national revenue

3. CUSTOMS ADMINISTRATIONS

- Enhanced Customs control
- Increased trade facilitation
- More effective and efficient deployment of Customs resources
- Reduced integrity problem
- Supply chain security and facilitation
APPENDIX 3: SAMPLE SWOT ANALYSIS MATRIX

With regard to Risk Management in Customs, the following Strengths, Weaknesses, Opportunities, and Threats (SWOT) matrix can serve Customs administrations as they seek to introduce or improve upon their Risk Management units in establishing the context.

<table>
<thead>
<tr>
<th>Strengths (+)</th>
<th>Presence (0 = No 1 = Yes)</th>
<th>Level of Importance (1-5) (5=most important)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducive political environment within Customs (political will)</td>
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<tr>
<td>Established Risk Management unit within Customs</td>
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<tr>
<td>Availability of administrative systems and procedures within Customs</td>
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<td></td>
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<tr>
<td>Capable and experienced Customs staff</td>
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<td></td>
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<tr>
<td>Customs staff skilled in IT application, automated systems, valuation database</td>
<td></td>
<td></td>
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<tr>
<td>Automated systems</td>
<td></td>
<td></td>
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<tr>
<td>Integrated efforts of operating units</td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses (-)</th>
<th>Presence (0 = No 1 = Yes)</th>
<th>Level of Importance (1-5) (5=most important)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of legislation on Risk Management principles</td>
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<td>Lack of formal cooperation between departments and sections</td>
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<tr>
<td>Lack of Risk Management institutional framework within Customs</td>
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<td>Lack of political will within Customs leadership</td>
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<tr>
<td>Lack of human resources</td>
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<td>Lack of transparency / selection of officers on the basis of merit of performance</td>
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<td>Lack of performance-based rewards and penalties</td>
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<tr>
<td>Lack of appropriate training in relevant fields</td>
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<tr>
<td>Lack of systematic information-sharing among operational units</td>
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<tr>
<td>Lack of vertical and horizontal integration of various IT-related areas (e.g., IT application, intelligence databases, valuation databases)</td>
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<tr>
<td>Lack of computerized infrastructure</td>
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<tr>
<td>Lack of standardized format for information collection</td>
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<tr>
<td>Lack of risk profiles created with resulting gaps causing operational problems</td>
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</table>
### Opportunities (+)

Are there any current or emerging external influences (e.g., funding or development) that could allow or require Customs to influence the Risk Management environment?

<table>
<thead>
<tr>
<th>Presence (0 = No  1 = Yes)</th>
<th>Level of Importance (1-5) (5 = most important)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political will</td>
<td></td>
</tr>
<tr>
<td>Whole government commitment to Customs modernization and facilitation</td>
<td></td>
</tr>
<tr>
<td>Increased transparency within government</td>
<td></td>
</tr>
<tr>
<td>Capable and experienced Customs staff</td>
<td></td>
</tr>
<tr>
<td>Government funding to support new staffing and technology within Customs administration</td>
<td></td>
</tr>
<tr>
<td>Increased compliance from traders</td>
<td></td>
</tr>
<tr>
<td>Increased interagency cooperation with Customs administration</td>
<td></td>
</tr>
<tr>
<td>Support from foreign donor agencies, including technical assistance and funding</td>
<td></td>
</tr>
<tr>
<td>Customs administration engaging as member of WCO and regional bodies</td>
<td></td>
</tr>
</tbody>
</table>

### Threats (-)

Who or what can threaten the implementation of the Risk Management environment?

| Non-compliant traders and other supply chain stakeholders |                                               |
| Inadequate public awareness on Risk Management issues |                                               |
| Political corruption |                                               |
| Bureaucracy in other governmental agencies |                                               |
| Existence of porous borders or unchartered roads |                                               |
| Global economic instability |                                               |
APPENDIX 4: RISK INDICATORS

TARIFF CLASSIFICATION
• Deliberate mislabeling or incorrect, vague or inadequate description of goods
• Products entered under the heading “Other”
• Systematic declaration of products under the sub-heading “Other”

ORIGIN
• No output of the product concerned in the declared country of origin
• Volume of imports exceeds the exporting country’s capacity to produce the product concerned
• The exporting country does not produce the originating raw materials required in the manufacture of the finished product

VALUE
• Declared value clearly out of line with international or national unit values
• Declared value clearly demonstrates uneconomical load (consider transport costs)
• Claims by importers of specific contractual agreements and special rates with the exporter
• Existence of a countervailing charge of specific additional duty

QUANTITY, WEIGHT, VOLUME
• Declared weight out of proportion to volume
• Volume of goods disproportionately large for the activities or needs of the company
• Declared gross weight of specific type of goods not in line with imports of similar goods

DATE OF IMPORT
• Mismatch between date of import and the transport documents in the case of products whose value, and thus duty owed, varies in accordance with the date they are declared

PACKAGING AND LABELING
• Unsuitable packaging for the types of goods
• Goods in non-standard packaging (e.g., watches in bags rather than boxes)
• Dubious labeling (badly printed, distorted, misspelled or faded)
• No labeling
• Labeling of the products themselves, or the instructions for them, badly translated
• Packaging that does not allow easy inspection
• Small postal consignments from the suspect country with the sender’s name missing, incomplete, or illegible
• Product requires specialized search equipment (dangerous products)
• Known “Quality Marks” missing from branded goods
ROUTE AND MODE OF TRANSPORT
- Long-distance transport including transit through a number of countries and a stopover, or transshipment – complicated route plan
- Choice of uneconomic route
- Uneconomic means of transport
- Mode of transport not appropriate for declared goods

ITINERARY
- Long-distance transport including transit through a number of countries and a stopover
- Change in the planned itinerary
- Numerous stops in-route
- Transshipment or change in means of transport

ECONOMIC RATIONAL OF OPERATION – VIABILITY
- Credibility of the business transaction (commercial incentive, economic rationale)
- Declared cost of goods in disproportionate to other costs (example: transport costs)

COUNTRY OF CONSIGNMENT
- High-risk country of origin or destination
- Country of consignment which suggests an origin other than the one declared

PREVIOUS IRREGULARITIES
- Analysis of records of trader’s past fraud or irregularities

STATISTICS
- Trade flow analysis (sudden change in the supplier countries)
- Change in supplier countries

PRODUCT TYPE/NATURE OF GOODS
- Imports of parts and components where, for instance, anti-dumping duties apply to the finished product alone, or vice-versa

COUNTRY OF DESTINATION - EXPORTS
- Suspicions regarding the country where the goods were entered for the transport procedure
- Direct consignments to countries with no market potential for the type of product exported
INCOMPLETE DOCUMENTATION
• Small postal consignments from suspect country with sender’s name missing, incomplete or illegible
• Missing supporting documents (for example, licenses)

PRESENTATION OF GOODS TO CUSTOMS
• Modus operandi of Customs from the moment goods arrive, and the interval between their arrival at a Customs office and actual presentation
• Enforcement of any provisions which may be in force on the placing of goods exempt from Customs duty under a Customs procedure
• Goods or vehicle not manifested

SUMMARY DECLARATION
• How the summary declaration is completed (possible mistakes in electronic recording of information)
• Excessive interval between presentation of goods at Customs and lodging of the summary declaration (possibility of substitution or removal)

SUSPECT IMPORTER
• Company established near a border and involved in an activity in which irregularities regularly occur
• Use of a high-risk transport operator

SUSPECT CLEARING OR FORWARDING AGENT, BROKER AND/OR DECLARANT
• Declarant in a weak financial position
• Historical record of errors

CORPORATE STRUCTURE
• Multinational/parent/subsidiary (example: special contractual arrangements)
• Foreign affiliates of subsidiary
• Monopoly/competition (example: problems with establishing true value)
• Recently established companies

FINANCIAL STRUCTURE
• High level of indebtedness

BUSINESS SECTOR
• A trader originally specializing in agricultural products originating in, or sent to, particular countries, changing his source of supplies or the destination of his products
• Non-specialist trader conducting occasional operations
• Whether or not a specialist forwarding agent is used
• New forwarding agent entering the market in a given type of product
• Specialist trader winding up operations or non-specialist trader starting to do regular business
• Firms producing similar goods in the country

TRADER’S BUSINESS STRATEGY
• Switch to new sources of supply or new destinations following introduction of new quotas for usual supplying countries or special conditions for imports and exports
• Significant change in import volume compared with a given reference period
• Substantial change in volume of imports or number of licenses applied for compared with a given reference period
• Company practicing policy of just-in-time deliveries (express deliveries): risks inherent in the need for speed

TRADER’S CUSTOMS STATUS AND STRATEGY
• Pattern of clearance (e.g., sudden switch to a different Customs clearance office)
• Customs authorizations: types of procedures used, whether the trader uses simplified procedures
• Cancellation or withdrawal of authorization to use a simplified or other Customs procedure
• New authorization applied for when an authorization granted earlier has had to be canceled for stated reasons

TYPE OF ACTIVITY
• Whether or not an officially approved exporter
• Whether a manufacturer or trader of goods under license
• Unfamiliar forwarding agent

MARKET POSITION
• Pattern of activity over a significant reference period
• Whether the operation in question is in line with the company’s usual activities

PROCEDURE BASED INDICATORS
• Type of transit procedure used
• The same goods undergoing a succession of transit operations (greater risk of the goods going astray)
• Goods dispatched form Customs offices known to be experiencing operational difficulties
• Guarantee document looks suspicious (e.g., dates or country names hard to read)
• Stamps illegible or too clear (possible falsification)
• Absence or presence of seals, depending on circumstances (the presence of seals could lull Customs into being less attentive)
## APPENDIX 5: SUGGESTED STANDARD RISK PROFILE FORMAT

<table>
<thead>
<tr>
<th>PROFILE #:</th>
<th>ANALYST</th>
<th>DATE GENERATED:</th>
<th>APPROVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RISK TITLE:**

**STEP 1: IDENTIFY THE CONTEXT**

Identify the context in which this risk occurs, such as anti-smuggling, commercial processing, air or border passenger processing, etc.

**STEP 2: IDENTIFY THE RISK**

Clearly and concisely define the risk that is the subject of this analysis. Definition should not exceed two sentences.

**STEP 3: ANALYZE THE RISK**

Step 3a: Summarize the source or sources of information or motivation that led to this analysis.

Step 3b: Formulate the initial questions you need to answer to conduct this analysis and the most likely sources of information that will allow you to answer them.

Step 3c: Describe the current controls in place to mitigate this risk and the extent to which they have been cost-effective.

Step 3d: Record the information you have gathered in your analysis and how you obtained that information.

Step 3e: Summarize your analytical conclusions.
### Step 4: Evaluate the Risk

**Step 4a:** Using agency specific critical operational requirements and definitions, estimate anticipated probability and consequences.

<table>
<thead>
<tr>
<th>PROBABILITY</th>
<th>CONSEQUENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPOSSIBLE = 1</td>
<td>INSIGNIFICANT = 1</td>
</tr>
<tr>
<td>LOW PROBABILITY = 2</td>
<td>MINOR = 2</td>
</tr>
<tr>
<td>PROBABLE = 3</td>
<td>MODERATE = 3</td>
</tr>
<tr>
<td>HIGH PROBABLE = 4</td>
<td>MAJOR = 4</td>
</tr>
<tr>
<td>NEAR CERTAINTY = 5</td>
<td>CATASTROPHIC = 5</td>
</tr>
</tbody>
</table>

**Step 4b:** Plot consequence and probability on risk evaluation matrix to determine severity of risk.

*Note: risk level scoring shown to the right is arbitrary and may be revised to agency satisfaction.*

**Step 4c:** State level of risk and summarize anticipated probability and consequences that led to that determination.

<table>
<thead>
<tr>
<th>CONSEQUENCES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- Low Risk = 1 – 8*
- Medium Risk = 9 – 12*
- High Risk = 15 – 25*
### STEP 5: IDENTIFY THE CONTEXT

**Step 5a:** Identify preventative measures that can reduce the likelihood or consequence of occurrence.

**Step 5b:** Identify control channel or combination of channels most likely to counter risk and explain reasoning.

**Step 5c:** Identify primary and secondary controls tools and the minimum application intensity necessary to effectively mitigate the risk.

<table>
<thead>
<tr>
<th>TYPE OF CONTROL INTENSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>____Document review ____% of declarations to be reviewed</td>
</tr>
<tr>
<td>____Physical examination ____% of shipments to be examined</td>
</tr>
<tr>
<td>____Post clearance controls ____% of declarations to be referred</td>
</tr>
<tr>
<td>____Other:</td>
</tr>
</tbody>
</table>

**Step 5d:** Write plain language selectivity criteria. Attach computer language selectivity criteria for future reference.

### STEP 6: MONITOR AND REVIEW (MONTHLY)

**Step 6a:** How many times during this review period did the risk profile result in a control being applied? What percentage of those controls resulted in the discovery of a discrepancy? What actions resulted?

**Step 6b:** If the risk profile has not been cost-effective during this review period, determine whether it should be modified or deleted. Describe each corrective action and date. Compare cost effectiveness to pre-control cost-effectiveness (Step 3c).
### SUPPLEMENTARY NOTES

#### TYPICAL STANDARD HEADING
- Number of record
- Date of origin
- Indicator type
- Brief title
- Issuing officer
- National, regional or specific customhouse

#### IDENTIFICATION/DEFINITION
- Clear
- Concise
- Specific

#### ANALYSIS
- Sources of Information
- Who, what, when, where, and how?
- Background information (historical/technical)
- Effectiveness of existing controls
- Materiality (in measurable terms if possible)

#### EVALUATION
- Evaluation will be based on the definitions developed for:
  - Level of consequence
  - Level of likelihood or probability
  - Level of Risk \((R = L \times C)\)
  - It is recommended that each risk profile include a risk matrix

#### MITIGATION ACTION
- What are recommended actions?
- Criteria
- Hits
- Examination Instructions
- Selectivity Percentage
- Information Dissemination
- Notice to other Departments
- Outgoing Information to Field Officers
- Recommendations
- Impact
- Period

### STEP 7: CONSULT AND COMMUNICATE (AS NEEDED, BUT NOT LESS THAN QUARTERLY)

If the risk profile has resulted in heavy activity in specific Customs offices or with one or more broker, trader or commodity (tariff) line, consult with appropriate managers or technical experts to determine how to improve compliance.

### APPENDICES

List appendices attached to the profile such as report of information which initiated the risk identification, supporting data, criteria in computer language, and other information referenced in the profile.
EXAMINATION CRITERIA AND INSTRUCTIONS

• Specify examination criteria and specific examination instructions in plain language.
  The computer programming language version of the criteria should be included in the appendices
• Type of control (document review, physical examination, post clearance audit, or combination)
• Intensity of control(s)
• Specific instructions to examining officer
• Requirement that all examinations be reported via inspection act

IMPACT

• What is the anticipated impact on workload? Estimated number of examinations that will be generated at each Customs office?
• Expected loss of revenue/impact on risk management priorities
• Clearance Office staffing levels
• Clearance Office examination bays
• Volume of work
• Complexity of work
• Time of Year
• Setting examination percentages (intensity)
• Period
• Must be sufficient to capture the data for subsequent review
• Must not be too lengthy or overburden
• Unless determined to be a risk of insignificance, every profile must have a time period included to trigger a review to monitor the Risk Profile

PERIOD

• Recommended period for action and when is review necessary? And why?

REVIEWS

• Frequency of profile review, and criteria to be evaluated. Once period is defined, findings should be documented, including changes made to the profile and examination criteria, and the reasoning behind those changes
• Summarize the results of each periodic cost-effectiveness review including all elements of the review and identify any corrective actions taken and the date of each action.

APPENDICES

• Information which initiated the Risk Identification
• Supporting data from analysis
• Justification for evaluation
• Criteria in computer language
• Information or forms referenced in the profile
APPENDIX 6: DEVELOPING SELECTIVITY CRITERIA

1. RISK PROFILES
Each risk profile should contain:

- A description/definition of the specific risk.
- An analysis of the risk including the research done by the analyst.
- An evaluation that establishes and justifies the assigned risk level.
- The treatment to be applied to the risk (type and intensity of controls, countermeasures, etc.).
- The ASYCUDA selectivity criteria including examination instructions.
- The date of the action (i.e., defined and implemented a treatment, modified the treatment, etc.).
- The date to review the profile to determine the cost-effectiveness of the action taken.
- The subsequent decisions to continue, modify or discontinue the criteria.

Risk profiles should be kept in an active filing system where they can easily be retrieved for periodic review and evaluation. The profile information is used as the basis for examination criteria.

2. CRITERIA CREATION IS NOT A CLERICAL FUNCTION
As an analyst, the officer determines the appropriateness and correctness of examination criteria.

- Officers’ primary mode of operation should be to research the database and other information available to identify, analyze, evaluate, treat and monitor risks.
- Officers are expected to be proactive rather than reactive.
- Officers’ secondary mode of operation should be reacting to requests from or to information provided by other officers or departments within Customs.

3. CREATE EXAMINATION CRITERIA TO ADDRESS THOSE RISK PROFILES THAT YOU DESIGNATED AS THE HIGHEST RISK
Risk analysts should use their experience, knowledge of Customs procedures, knowledge of the automated declaration processing system, and professional contacts with other units and agencies to develop examination criteria. As officers start this process, they should remember that fewer well-designed criteria are significantly better than numerous, poorly considered criteria.
Officers should begin by reviewing the highest risk profiles and considering the appropriate treatment. They have a responsibility to ensure that resources are directed to the highest risk activities. As they design appropriate treatments, they should consider:

- Does the criteria request address Customs administration priorities? Focus on high-priority risks that are not nuisance issues. As selectivity is implemented at field offices, officers may find themselves receiving requests from field officers and other administrative units to enter additional criteria. These criteria can still be added.
- What is the treatment's goal or objective? What benefit does Customs expect to achieve by examining shipments that meet this risk profile?
- What is the appropriate control? Physical examination, document review, audit, investigation, compliance intervention, blitz, random sample?
- What is the appropriate intensity? What is the lowest percentage of interventions necessary to achieve the desired result?
- What will the impact be on the workforce? Do sufficient resources exist to perform the defined type and intensity of the controls defined in the criteria?

4. ASSESSING THE CRITERIA IMPACT

Examination criteria must take into account their impact on resources. Officers should have concrete knowledge of how many of each type of control each cargo processing facility or auditors or investigators can properly perform on a daily basis, and determine whether the proposed criteria will exceed that capacity.

Personnel resources are limited and priorities are numerous. Local managers should be informed in advance of significant increases to the projected workload. A sudden and dramatic increase in examinations can result in staffing shortages, which will require a solution to lessen the workload impact.

- The impact assessment should provide an estimated number of tariff line item hits caused by the newly created criteria. This assessment is obtained by comparing the combination of new targeting elements with those elements of the prior import activity for a like period of time. For example, if the new criteria are proposed for 90 days, it may be appropriate to examine the previous 90 days (unless the import is seasonal, in which case it could be more appropriate to examine the corresponding 90 day period of a previous year).
- Once included in the system, officers should regularly re-examine criteria to track results, and consider the cost-benefit of their impact on staffing and workload.
- All criteria should be reviewed for targeting effectiveness, and periodically evaluated. Impact assessments prior to creating criteria can only estimate the future number of hits. The targeting effectiveness and criteria evaluation conducted after the criteria have been activated will provide an accurate report of the number of exams or reviews, against whom, and their results. Ineffective or outdated criteria should be amended or deleted.
5. SELECTING THE TARGETING ELEMENTS

Targeting elements should address enforcement concerns without unfairly delaying the release of any cargo, or improperly deploying Customs personnel. There are two basic steps to follow in order to select the targeting elements:

- Research, analyze and evaluate the potential risk indicators (the companies, commodities or countries) and select the combination most likely to target noncompliant transactions.
- Perform an impact assessment against the proposed combination of risk indicators to target noncompliant shipments.

The combination of risk indicators is called the risk profile. The more elements included in the profile, the more effective that profile will be. The following demonstrate simple examples of elements to target (before taking into consideration the potential impact on workload):

- If a company is suspected of being a terrorist front organization and a decision is made to examine all their goods, the consignee would be targeted without regard to the tariff, country or other data elements.
- If a certain commodity is considered restricted or prohibited merchandise if from a given country of origin, officers would target the tariff number and that country.
- If intellectual property right violations are usually attributed to the foreign manufacturer, and possibly the importer, officers would almost certainly want to target the manufacturer for Intellectual Property Right violations.

6. APPLYING THE TREATMENT

- Decide what type of control is likely to be the most effective approach. For example, how does a physical examination help to identify instances in which the quantities and commodity are correct but the Customs value has been under-declared?
- Decide what percentage of shipments meeting the risk profile need to be subjected to that control to effectively treat the risk. Typically, writing a selectivity criterion that designates 10-20% of transactions meeting a risk profile will be sufficient.

7. REQUESTS FROM FIELD OFFICERS

Analysts receiving a request from field officers must perform additional research, evaluation and criteria impact assessments to make the proper determination regarding any criteria input request.

- The analyst must answer the following questions:
  - Is it a reasonable request and can the requested action be accomplished? (If not, talk to the requesting officer. Perhaps amending the requested targeting action would be a better risk management decision and provide for better targeting than that offered on the original request.)
• Are the requested actions in accordance with Customs regulations, policy and guidelines regarding our authority to review documents and inspect cargo? (For example, criteria to examine all shipments filed by a broker who does not file declarations in a timely manner may not be the appropriate action for the situation.)

• What alternative solutions are available to accomplish the goal? (Criteria should only be created when that is the appropriate action to accomplish a goal, and it is created for legitimate reasons. Officers may determine it is not appropriate to have cargo selectivity criteria targeting at all. If that is the case, officers should provide reasons for rejecting the criteria request. If the task cannot be adequately addressed through criteria targeting, suggest an alternate solution to the requestor.)

• Is there sufficient information in order to evaluate the appropriateness of the requested action? (Too little information can result in ineffective or inappropriate action, and/or may require additional research to discover information that the requesting officer could have provided initially. Some examples of this information include: seizure, penalty or investigative case numbers; entry number; and the consignee or Harmonized Tariff Schedule (HTS) numbers if those elements are material and are to be targeted. Officers must utilize their experience concerning the type of issue and what information should be available concerning that issue, and/or their knowledge of the requestor’s competence or lack of understanding concerning required information. Officers who believe they are missing crucial information should consult the requestor before beginning research.)

• It is the analyst’s responsibility to fully develop any suspicions by researching the historical database and other available sources available, such as seizure and penalty reports, intelligence reports.

• Officers should verify information they are provided.

• Officers should consider the priority status of the issue and the seriousness of the allegation in order to determine how much research is appropriate.

• Officers should feel empowered to stop research if it becomes evident it is not necessary. While it is important to be thorough, resources are limited and may not be warranted by the significance of the issue.
APPENDIX 7: RISK EVALUATION EXAMPLE

The following is an example of the Risk Matrix for reference. Please refer to Appendix 4: Risk Indicators, Appendix 5: Suggested Risk Profile Format, and Appendix 6: Risk Based Decision-Making Process. For the purpose of this example, the Likelihood/Probability and Consequence levels defined as samples on pages 19 through 22 have been applied.

TABLE 2.3 - RISK EVALUATION MATRIX

<table>
<thead>
<tr>
<th>PROBABILITY/LIKELIHOOD</th>
<th>CONSEQUENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Insignificant</td>
</tr>
<tr>
<td>Risk Severity =</td>
<td>1</td>
</tr>
<tr>
<td>Probability of Occurrence x</td>
<td></td>
</tr>
<tr>
<td>Potential Negative Consequence or Impact</td>
<td></td>
</tr>
<tr>
<td>Risk Intensity</td>
<td></td>
</tr>
<tr>
<td>Acceptable = 1 – 5</td>
<td></td>
</tr>
<tr>
<td>Moderate = 6 – 12</td>
<td></td>
</tr>
<tr>
<td>High = 15 – 25</td>
<td></td>
</tr>
</tbody>
</table>

- Insignificant: 1
- Minor: 2
- Moderate: 3
- Major: 4
- Catastrophic: 5

- Almost Certain: 5
- Highly Probable: 4
- Probable: 3
- Less Probable: 2
- Improbable: 1

- ≥ 90%: 5
- 51 – 89%: 4
- 31 – 50%: 3
- 11 – 30%: 2
- ≤ 10%: 1
Phase 1 – Context: Commercial Processing of importation of White Fish (Tilapia) from Country X. Foreign Trade Agreement (FTA) preferential country of origin in place. Potential for non-compliance impacted by lack of clear examination instructions and cold storage infrastructure.

Phase 2 – Identification/Definition of Risk: Potential for trans-shipment and inaccurate false claim of country of origin in order to claim preferential FTA and avoid payment of duties.

Phase 3 – Analyze the Risk: Information from the Seafood Importers and Exporters Association indicate competitor is offering product at 20 percent reduction of price. Source claims that the origin of the fish is from historically non-compliant Country YY, not Country XX, which has an FTA with the destination country. Research also indicated that the production capacity of farm-raised fish from Country XX is less than the amount imported over the past year.

Existing controls are ineffective due to inadequate cold examination facility.

Broker and importer have historic records of non-compliance, and prior internal affairs investigations indicate a high possibility that they have made non-official payments to expedite clearance.

Food and Drug Administration licensing and permit requirements may be impacted.

Consideration of Risk Indicators:

- Origin
- Re-packing to hide country of origin
- Numerous stops between the country of arrival to country of destination (trans-shipment)
- Number of times the goods have been moved, seaport to warehouse, to another warehouse, etc.
- Invoice compared with Maritime Manifest, BOL, company records
- Significant change of import volume
- Analysis of trader’s past non-compliance, fraud, and/or irregularities
- Documents difficult to read, stamps, certificates, licenses are suspicious
- Shared information with Country XX regarding export data
- Packaging and labeling
Materiality:

- Potential loss of revenue is major
- Customs professionalism requires additional scrutiny
- Government is making decisions based on inaccurate trade statistics regarding the impact of FTA with Country XX
- Possible issues with product safety

Phase 4 – Evaluation of the Risk:

<table>
<thead>
<tr>
<th>Critical Operational Responsibilities</th>
<th>Likelihood/Probability</th>
<th>Consequence</th>
<th>( R = L \times C )</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Revenue Collection</td>
<td>5</td>
<td>4</td>
<td>20 = 5 \times 4</td>
<td>High</td>
</tr>
<tr>
<td>2. Customs Professionalism</td>
<td>3</td>
<td>2</td>
<td>6 = 3 \times 2</td>
<td>Low</td>
</tr>
<tr>
<td>3. Protecting Economic Interests</td>
<td>4</td>
<td>4</td>
<td>16 = 4 \times 4</td>
<td>High</td>
</tr>
<tr>
<td>4. Protecting Society</td>
<td>3</td>
<td>2</td>
<td>6 = 3 \times 2</td>
<td>Low</td>
</tr>
</tbody>
</table>

Revenue Collection is the highest risk and will determine the high-risk designation. Other Selectivity criteria will be created relative to protecting economic interests, with fewer criteria for professionalism and protecting society in conjunction with Food and Drug. Joint examinations for both Customs and FDA should be conducted.

Phase 5 – Treat the Risk: Based on risk level, the type of control treatment will be determined and the intensity of the control, i.e., the percentage of declarations assigned to a treatment channel.