
Risk management techniques and their use by Customs

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ABSTRACT

Today risk analysis and risk management techniques are part of any decision making process in practically every kind of organization. Generally speaking, such methodologies can be applied to all those situations where an undesired or unexpected event can have a significant impact on the objectives of a certain entity. For Customs, in particular, risk analysis & management techniques are helpful to optimize both human and financial resources, reduce costs, expedite clearance, limit corruption (where inspection processes are automated), thereby improving their overall efficiency and performance.

Indeed, if adequately implemented, customs risk management can offer valuable support to Customs in their effort to find the right balance between their control task and facilitation-related goals.

The use of risk management by Customs administrations is encouraged by the Revised Kyoto Convention (RKC)ⁱ⁾, the “Framework of Standards to Secure and Facilitate the Global Trade”(SAFE), and constitutes one of the 10 building blocks of the “Customs in the 21st Century” an action plan developed by the World Customs Organization (WCO) which lays the foundations for a strategy for the future of Customs.ⁱⁱ⁾

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i) The Kyoto Convention was one of the major outcomes of the Customs Cooperation Council (the forerunner of the World Customs Organization). Adopted on 1973, it establishes a uniform set of rules and guidelines to be implemented by Customs administrations, aimed at improving their efficiency and transparency, reducing transaction costs and promoting trade. The Convention of Kyoto was revised by the WCO Council on 1999 to put it better in line with new technological developments, advances in information technology and international trade practices. The “revised” version took effect on 3rd February 2006, namely three months after forty Contracting Parties have signed the Amendment Protocol or have deposited their instrument of ratification or accession.

The WCO is also developing a “Risk Management Compendium” scheduled to be published in June 2011 with the aim to provide guidance to its members on the proper implementation of organizational risk management systems within any area of Customs management. Ultimately, risk assessment and risk analysis techniques constitute one of the proposals being discussed as part of the WTO negotiations on trade facilitation.ⁱⁱⁱ⁾

Keywords : WCO, Risk management, Customs risk, WTO negotiation.

ii) Customs in the 21st Century is a policy paper adopted by the WCO Council during its annual session in June 2008. It contains a set of measures, to be implemented by the customs administrations member of the Organization, aimed at enhancing customs operations globally and promoting security and trade facilitation. The document is structured in ten building blocks [1. Globally networked customs; 2. Better coordinated border management; 3. Intelligence-drives risk management; 4. Customs-business partnership; 5. Implementation of modern working methods, procedures and techniques; 6. Enabling technology and tools; 7. Enabling (legal) powers; 8. Professional, knowledge-based service culture; 9. Capacity building; 10. Integrity].

iii) See WTO, Negotiating Group on Trade Facilitation, doc. TN/TF/W/165/Rev.3, 5 July 2010. WTO Members agreed to launch negotiations on trade facilitation in July 2004, on the basis of modalities contained in Annex D of the General Council’s decision on the Doha Agenda work program (so-called “July package”). Under this mandate, Members are directed to clarify and improve GATT Article V (Freedom of Transit), Article VIII (Fees and Formalities connected with Importation and Exportation), and Article X (Publication and Administration of Trade Regulations). The negotiations also aim to enhance technical assistance and capacity building in this area and to improve effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues.

I. INTRODUCTION

Customs day-to-day work consist of scrutinizing large volumes of export, import and transit consignments, to ensure that the movement of vessels, vehicles, aircraft, goods and persons across international borders complies with customs laws, regulations and procedures in force. In the past, Customs officers used to inspect goods and accompanying documents directly at the border, before releasing consignments. Hence, operators could be confident that goods that had cleared Customs complied with all applicable regulations. Nowadays, the enormous and ever-increasing quantities of commodities and products that are exchanged across international markets, coupled with the need to reduce congestion at ports, airports and inland borders and assuring a fast release of goods to operators, so as to avoid disruption in the supply chain¹⁾, make it almost impossible for Customs authorities to check all goods that enter, or leave, a customs territory.

This situation, therefore, has pushed Customs to introduce risk management principles within their organization, especially in relation to planning and conducting inspections, applying more selective and targeted controls to detect Customs fraud and other offences or irregularities.

The Oxford Dictionary of English defines a “risk” as the possibility of meeting danger or suffering harm. Risk management has been defined as a process aiming at “understanding the nature of uncertain future events and making positive plans to mitigate them where they present threat or to take advantage of them where they present opportunities” (Taplin, 2005 quoted in Vargas-Hernández 2010, p. 236)²⁾. In practice, risk management results in the systematic application of a set of policies, procedures and practices aiming to identify, analyze, assess, handle, monitor and prevent those risks, in order to minimize the possibility of danger or harm to an acceptable level.

1) Any disruption in the supply chain implies for companies a delay in the availability of goods, that impacts also on financial performance indicators such as Days in Inventory, Days Sales Outstanding and Cash Flow.

2) Vargas-Hernández, J. G. 2010, *Risk or Innovation, Which One Is Far more Preferable in Innovation Projects?*, International Journal of Marketing Studies Vol. 2, No. 1; May 2010.

II. USING RISK MANAGEMENT BY CUSTOMS

Risk management techniques were utilized for the first time in the United States in the 1950s, by some large insurance companies, financial institutions, and investment firms to control increasing financial risks in what was, at that time, a rapidly changing business environment³). The use of risk management techniques by customs administrations expanded in the '80s, gaining impetus after the 9/11 events, with the introduction of the first programs for the security of the supply chain, such as the Container Security Initiative (CSI) and the Customs-Trade Partnership Against Terrorism (C-TPAT). Risk management for Customs authorities has become a world-wide necessity.

The legal basis for the use of risk management techniques by Customs is Article VIII, par. 1(c) of GATT (1994). This Article highlights the need to minimize *“the incidence and complexity of import and export formalities ...[by] decreasing and simplifying import and export documentation requirements”*. Risk management techniques in Customs procedures, as stated above, are a means to expedite the clearance of goods. Moreover, selective inspections provide a much more efficient approach. In particular, profiling, selectivity and risk management techniques allow Customs to identify with sufficient precision shipments that represent little or no risk, so that their resources can be allocated more effectively and efficiently towards those operations that constitute the greatest risks of non-compliance. As a result of this approach, a large number of shipments nowadays are cleared automatically through Customs, with no physical or documentary controls at the border, rather, these formalities are being carried out at the premises of the operator, after physical clearance of the goods. This means that, in practice, Customs officers focus a greater part of their efforts in verifying the compliance history of the company with import/export laws and regulations during the course of post-clearance controls and on-site audits. As a matter of fact, implementation of post clearance audit is part of any risk management strategy and contributes to maintaining the balance between trade facilitation and control⁴). Post-clearance controls, in particular, are regarded as one of the most effective measures for detecting commercial fraud, especially on the customs value of goods⁵).

For this reason, the implementation of risk management procedures require legislative, organizational, and staffing changes, that are usually part of large Customs modernization projects.

3) Hong Kong, Office of the Ombudsman, “Risk management and its application, April 1998.

4) UNCTAD Trust Fund for Trade Facilitation Negotiations, Technical Note 5, “Post-clearance audit”, June 2008

5) WCO News, Special dossier *“Risk management: a critical Customs tool”*, No 62, June 2010.

Legislation, in particular, must enable information collection and sharing among different agencies, including international organizations and administrations, where appropriate. In fact, management of customs risk benefits also from an international component, as the interaction between Customs and other administrations and agencies abroad can significantly improve information gathering and enforcement options⁶). The implementation of risk assessment approaches in customs procedures may also imply significant infrastructural and organizational changes within the administration, as well as an adaptation of the internal structure. For example, it requires the establishment of Risk Management Units or national/regional intelligence structures able to provide strategic and operational intelligence. In addition, it obliges Customs to commit less officers to physical and documentary examination, assigning them instead to auditing tasks.

Moving from border checks to audit-based controls, however, means also that a great amount of responsibility and risk is transferred from Customs to traders. In fact, it is up to economic operators to use all the instruments available to them to identify and report to Customs any error or irregularity occurring during their commercial operations, exercising strong supervision over these, and keeping an audit trail of all the transactions made⁷). Customs authorities, from their side, reward the compliance record of accurate declarations and timely payments by operators, granting them exemptions from the ordinary controls and less burdensome procedures and requirements.

Programs for the security of the supply chain, such as Authorised Economic Operator (AEO) and C-TPAT, are based on this concept of “partnership” between Customs and economic operators, where pre-authorized and reliable traders⁸) benefit from a reduction in the examination of routinely imported goods and have priority for inspection. Indeed, the development of cooperative relations with the business sector is proven to constitute a factor able to improve to the quality of border controls, because it helps Customs to better identify consignments suspected of infringing international trade rules, and at the same time achieves a satisfactory level of trade facilitation essential to the economic growth⁹). The above concept is stipulated in the General Annex, Chapter 3, Standard N° 3.32 of the RKC: *“For authorized persons who meet criteria specified by the Customs, including having an appropriate record of compliance with Customs requirements and a satisfactory system for managing their commercial records, the Customs shall provide for: release of the goods on the provision of the minimum information necessary to*

6) Dunne, M., “Getting to grips with risk management”, WCO News, No 62, June 2010.

7) Truel, C. “A Short Guide to Customs Risk”, Gower Editions, August 2010.

8) The concept of authorized traders relates to businesses and other participants in the supply chain, including logistics providers.

9) APEC Secretariat, “Customs-Business Cooperation programmes”, September 2006.

identify the goods and permit the subsequent completion of the final Goods declaration; clearance of the goods at the declarant's premises or another place authorized by the Customs...

Implementing a criterion of “selectivity” of controls implies the need for Customs to identify the most “high-risk” commercial operations and directing the declarations into appropriate control channels (e.g. “Green channel” = Immediate release of goods without examination; “Red channel” = Physical examination of goods and documents)¹⁰).

As a rule, targeting techniques today rely on innovative methods, based on the use of sophisticated IT systems and software which speeds up tasks that previously depended exclusively on the Customs officer's experience, judgment and insight. Automated risk analysis methods are also able to minimize possibilities for corruption, as they avoid any discretionary intervention of Customs officers in the selection of consignments to be subjected to controls. These systems and software collect all the relevant data that needs to be entered into risk analysis equations and interpret the results. Furthermore, these data can be reused, greatly reducing the time required to perform subsequent analysis - this would not be case if done manually.

The process of selection of goods for intervention depends on the basis of the risk profiles that have been previously defined within a risk analysis and assessment process.

Risk assessment is the systematic determination of risk management priorities by evaluating and comparing the level of risk against predetermined standards, target risk levels, or other specified criteria. This is an analytical process used to determine both actual and acceptable level of risk and includes the assessment of the probability that goods subject to Customs control may have not been declared, or fully declared. Risk analysis is an essential part of risk assessment and provides valuable information to decision-makers on whether and how risks under consideration need to be treated, as well as the available and most appropriate treatment possibilities.

Risk profiling is the means by which Customs puts risk management techniques into practice. Risk profiles consist of a combination of both subjective (i.e. related to the operator) and objective (i.e. related to goods) indicators, such as: known trader; financial situation of the operator; level of compliance to tax and customs regulations and frequency of transactions they carry out; nature of cargo (e.g. hazardous/non hazardous goods); value; origin and destination of goods; eligibility for tariff preferences; applicable duties; mode of transport used; and previous examination results.

10) In addition to the green and red channels, certain Customs s have developed further control channels, such as the “yellow Channel” = Documentary check; the “Blue Channel” = Examination at a later stage, i.e. post audit (this is the case of Turkey or Rwanda), or the “Orange channel” = Examination of goods through X-ray scanner or other non-intrusive inspection methods (Italy).

The development of risk profiles relies, in turn, on a wide range of information and data elements which are collected from a variety of sources, and subsequently analyzed and categorized. This process is not static, but interactive, being information, data and targeting criteria continuously updated, analyzed, acted upon and reviewed. The results of controls are continuously fed into the system, enabling constant updating of risk profiles.

To assist its member countries in the establishment of such profiles, the WCO has developed various tools that allow the management of intelligence analysis aimed to identify risks and develop strategies for preventing or reducing them¹¹). Furthermore, WCO offer comprehensive training programs for both management and the Customs officials concerned, as a successful operation of this technique requires preparatory activities with a view to creating awareness and understanding of the system.

Australia provides a good example of the approach towards risk management and automated border controls. The Australian Customs and Border Protection Service (ACBPS) rolled out their latest IT solutions in 1995, with underpinning legislation giving sweeping new investigative powers to customs officers, signaling a revolution in the way international business, in the context of border control, would be conducted in the future. Adhering to the principles of the RKC, the ACBPS has implemented a system for export and import clearance that is almost 100% electronic. Although Australian legislation still allows traders and service providers in that country to deal with consignments on a non-electronic basis, the reality is the non-electronic procedures are so torturous as to be an effective discourager. The ACBPS have advanced so far that they announced in 2008 that they would not be pursuing the AEO program because, according to the ACPBS, Australian traders were already reaping the trade facilitation benefits of the current border control system, considered by them to be at least equivalent to those offered globally through the AEO program. Nevertheless the ACBPS “will remain alert to the possibility that any growing international network of Authorised Economic Operator program may develop into a form of trade barrier for Australian traders. For the moment ... we see further exploration on improving risk management through identification of low risk traders and transaction without the high costs of a formal AEO accreditation regime as amore immediate priority”¹²).

Similar approaches, customized to individual customs authorities' requirements, are also evident on other countries. For example, the USA Customs and Border Protection's adopts the “Automated Targeting System” (ATS), one of the most advanced targeting systems in the world,

11) UNCTAD Trust Fund on Trade Facilitation Negotiations, Technical Note No. 12, “*Risk management in Customs procedures*”, November 2008, rev. 2.

12) Australian Customs and Border Protection Service, Authorised Economic Operator Pilot Project Report, June 2009, p. 4.

fed with real-time data from different CBP mainframe systems, such as the Automated Commercial System (ACS), the Automated Export System (AES), the Automated Commercial Environment (ACE), and the Treasury Enforcement Communication System (TECS). The ATS also collects data from commercial carriers, foreign governments and certain express consignment services in conjunction with specific cooperative programs.

Another example is provided within the European Union, where each Member State adopts its own targeting system based on national standards and risk criteria for the selection of goods and economic operators subject to controls. Even though the European Commission has developed an automated risk management system allowing exchange of Risk Information Forms (RIFs) between member States¹³, to date, a fully-integrated approach to risk analysis is still missing at the EU-level. However, the EC Regulation No 648/2005 of the European Parliament and Council of 13 April 2005, that amended the EEC Regulation No 2913/92 (Community Customs Code), introducing the so-called “security amendments to the Community Customs Code”, encourages the EU Commission to develop a risk management framework common to all Member States at EU-level, in order to assure a uniform treatment of risks, an harmonized application of customs controls by the Member States and, consequently, an equivalent level of protection in customs controls for goods brought into or out of the customs territory of the Community. To this end, a standardized framework for the risk management process at EU-level has been developed on 2006 with the “*Standardized framework for Risk Management by the customs administrations of the EU*”¹⁴, a strategic plan developed in partnership between the EU Member States and the Directorate General Taxation and Customs Union of the EU Commission, that sets out an agreed approach to the development of risk management procedures by the Customs administrations of the EU member States. The model describes the key steps in the comprehensive use of risk management by EU Customs administrations, incorporating various elements, consistent with existing risk management standards¹⁵. This risk management approach comprises four main phases, rotating in cyclic order: 1) *Identifying parameters*: that is, defining, measuring and focusing risks; 2) *Analysing*: that means identifying the likelihood that risks can occur and prioritizing them; 3) *Treating*: the implementation of a series of actions aimed to reduce or

13) RIFs are fiches exchanged electronically among the EU Commission and member States, that facilitate the sharing of information on risks between the appropriate risk management centres and customs control points in the Community. In the last three years, EU member States have exchanged 6,330 RIFs on risks in the customs area, while the EU Commission has issued 64 RIFs on risks falling within the competence of customs (EU Court of Auditors, Special report N°1/2010, “Are simplified customs procedures for imports effectively controlled?”).

14) http://ec.europa.eu/taxation_customs/resources/documents/framework_doc.pdf

15) Australia/New Zealand Standards, Risk Management: Principles and Guidelines, AS/NZS ISO 31000:2009.

eliminate negative consequences or to reduce the likelihood of an adverse occurrence; and 4) *Monitoring and learning*: this latter phase is characterized by the identification of new risks - with the establishment of an action plan for those ones that are above a certain threshold, redeploying resources and documenting the experience gained in the cycle for use in future actions.

Such methodical approach to risk management can effectively enhance the ability of Customs to manage risks, providing the basis for more rational decision-making processes within the organization at all stages - from strategic decisions through to managerial decisions and routine operational decisions, so improving their overall performance, without negatively impacting on trade facilitation and the flow of goods.

The implementation of such comprehensive risk management systems requires intensive resources, both in terms of funding and time. For example, the current border clearance system operating in Australia, started as the Cargo Management Re-engineering project (CMR)¹⁶⁾ in the early 1990s, took more than a decade to develop and implement, with a cost of over 30 million dollars. The CMR sought “to establish a seamless cargo management system for Australian businesses trading with the world”¹⁷⁾. The CMR project delivered what is currently the Integrated Customs System (ICS), an electronic platform that was introduced during 2004-2005 with the benefit of supporting legislation. Embedded in this system are a number of risk management considerations. For example, an ‘authority to deal’, typically in the form of an Export Declaration Number, will not be issued where the export declaration has errors, meaning the exporter cannot send the goods to the export terminal. Under the previous system permissions to export were issued even where errors existed, making it easier for consignments to leave the country in error. The timing of the export declaration lodgement has also been tightened, as this must now take place prior to export, because the Cargo Terminal Operator (CTO) would be in contravention of Section 115 of the Customs Act 1901 if they permitted goods to be loaded on a vessel or aircraft without an authority to deal. In practice, this requirement means that cargo has been reported to customs before it is handed over to the export CTO, giving local customs authorities earlier control over the consignment, hence better risk management. However, this is not the case internationally. The ACBPS found that there is “a high degree of data misalignment [between customs authorities, with] critical data required for import clearance not available from overseas”¹⁸⁾, thus making it difficult to create a ‘closed loop’ risk management system for international

16) <http://www.customs.gov.au/webdata/minisites/april99/page7.htm>

17) Australian Customs Service, 1999, *Cargo Management Re-engineering*, Manifest, Vol.2, No. 1, p. 7.

18) Australian Customs and Border Protection Service, Customs to Customs Data Exchange Proof of Concept Report, March

border protection activities. Indeed, this was one of the findings during the APEC Single Window Project, established to explore opportunities to “facilitate legitimate trade and enhance supply chain security”¹⁹⁾. Unfortunately, the work of this project was affected by other world events, as “the current economic climate has understandably seen customs administrations reassess expenditure to focus on core business. The option to discontinue a formal work plan under the ‘single window’ umbrella would allow complete flexibility for economies to pursue these development at their own pace and on an ad-hoc basis”²⁰⁾. During the course of 2010 the APEC Sub-Committee on Customs Procedures “will be reviewing the extent of implementation of single window initiatives in each member economy. This will assist in determining appropriate future courses of action to both develop single windows in each APEC economy and accelerate seamless data sharing between single window systems”.²¹⁾

III. CONCLUSION

It is clear that the most advanced customs authorities are embracing and implementing the principles of the RKC, SAFE and of the “Customs in the 21st Century” policy paper. In the case of the latter mentioned plan, “intelligence-driven risk management” is recognized as one of the 10 main factors that will influence the efficiency of customs and enhance their operations globally, for the future. Indeed, the expanding responsibilities and challenges faced by modern Customs, require a more sophisticated approach in identifying and selecting consignments for border intervention. Many Customs administrations worldwide are expending great efforts in this direction, reviewing their priorities in order to protect both the revenue interests (through more targeted controls) and society (by focusing more on partnership programs with the private sector and on joint non-fiscal controls with other competent authorities. In this respect, the WCO’s assistance in the proper implementation of risk analysis and risk assessment techniques is crucial, especially in view of a future harmonization of risk assessment methodologies at global level, as a pre-requisite for the creation of a “globally-networked Customs” environment - a new concept of Customs-to-Customs cooperation and one of the more ambitious objectives of the “Customs in the

2009.

19) APEC Sub-Committee on Customs Procedures, Single Window Implementation Guide, July 2009, p. 7.

20) APEC Sub-Committee on Customs Procedures, Single Window Working Group Phase 2 Final Report, July 2009, p. 38.

21) http://www.apec.org/apec/apec_groups/committee_on_trade/sub-committee_on_customs.html

21st Century” document.

One of the issues that will remain in the short to medium term is the difficult task of creating an effective world-wide system that will truly enable the securing of the supply chain at any customs check point, as after all any security chain is only as strong as its weakest link. From a risk management perspective, the difficulties in securing the supply chain rest with the different levels of sophistication and capabilities of poorer nations who do not have the means to enhance their systems and processes without external assistance. Therefore, if the ultimate goal is to develop a truly global supply chain security system, it may be necessary for organizations such as the WCO and APEC to provide appropriate funding.