
Chapter TWO

Risk Management Implementation in Africa, Lessons Learned

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Abstract

With the ever increasing growth in the flow of trade coupled with other 21st Century challenges as experienced by African and global border agencies, contrasted by the limited resources available to Customs administrations, the implementation of Computerized Risk Management (CRM) Systems within the Customs environment has been increasingly recognised as one of the most effective methodologies to achieve Trade Facilitation in accordance with the WCO Revised Kyoto Convention (RKC) and the WCO SAFE Framework of Standards (SAFE).

Considering the critical role played by African Customs administrations in facilitating trade, safeguarding national safety and security including their responsibilities of revenue collection, it becomes obvious that implementing a Risk Management System at the core of any Customs organisation's ICT system, in line with WCO Revised Kyoto Convention (RKC) and WCO SAFE Framework of Standards, will have a significant positive effect for Customs as well as the regional and national trading community. However, despite the potential benefits, the main challenge is that many African Customs administrations fail dismally at the point of implementation of a Risk Management Program within such a system.

This paper addresses and reflects current empirical and experience-based conclusions and expounds the challenges that will face any African Customs administration, in introducing a Risk Management System, in its environment, and recommends a practical strategy of implementation.

1.0 INTRODUCTION

The new WTO Bali Agreement on Trade Facilitation (December 2013), within its Articles, re-emphasised the necessity and urgency for all member countries to "expedite the movement,

clearance and release of goods (including transit)" through 1. availability and transparency¹ of imports, exports and transits procedures, 2. standardization, simplification and streamlining Customs and port administrations operations, 3. provisions of advanced imports declaration lodgement and electronic payment capability and 4. implementation of Authorised Economic Operators (AEO) and bilateral/regional agreements programmes.

Although, many African Customs administrations have made significant progress in reducing clearance costs, and in initiating AEO Programmes (e.g., East African Customs Community) revenue mobilisation still remains their primary focus in order to close national budget deficits and sponsor their education, health and poverty reduction strategies. The main challenge of these administrations is how to consistently secure tax revenues and ensure compliance within the customs control legislative framework while providing an appropriate level of Trade Facilitation. Therefore, the development of smart enforcement strategies that help to ensure these key objectives (Revenues, Security and Fast Clearance) are of critical national importance. This necessarily requires African governments in compliance to global WTO and WCO instrument's and agreements, to promote and speed up the automation of all customs processes and procedures coupled with a more targeted clearance approach supported by Risk Management as orchestrator (Brian Glancy 2014). Unfortunately, many African Customs Administrations are still lagging behind primarily due to their lack of adequate human and technical capacity to implement dynamic

¹ Accessibility to customs information via publication, internet and enquiry points, advance ruling to any interested person and opportunity to comment on customs decisions and appeal for an impartial review.

and effective risk management systems².

To address this specific objective, several private companies in collaboration with African Customs administrations started in 1999³ to implement Computerised Risk Management systems coupled with non-intrusive Cargo Scanning facilities (X-ray machines and radiation detectors) as an integrated component to Customs technical capacities.

This study, as conducted, takes stock of more than a decade of practical experiences in implementing automated and dynamic risk management solutions within an African context, and also presents various approaches to risk management and emphasises the barriers that impede the successful implementation of risk management initiatives. The study suggests a way forward including recommendations on how risk management solutions could be leveraged to drive and increase the efficiency and the effectiveness of Customs administrations in Africa. Risk Management is specifically addressed in the Bali Agreement.

It is expected that this empirical study will contribute to filling the gap of informed literature on empirical studies and experiences in the field of risk management within African Customs administrations. The positive outcome should inevitably be to achieve trade facilitation in accordance to global compliance standards.

1.1 Risk Management Approaches

Risk Management (RM) should not be confused with “risk assessment” which consists of a series of technical processes intended to identify and quantify individual risks. The WCO Risk Management Guidelines define RM as a “systematic application of management procedures and practices providing Customs with the necessary information to address

² Rather than static and rigid systems easily decodable by the fraudsters.

³ Cotecna was the pioneer in implementing in collaboration with Ghana Customs Administration a computerised risk management system using statistical approach methodology alongside Scanners Operations.

movements or consignments which present a risk”. Thus, RM is an expansive and continuous process that involves identifying the risks and threats, analysing, quantifying and classifying them, utilising rigorous methods and applying appropriate counter-measures taking into account the balances and priorities of revenues collection – security – trade facilitation.

Following the enforcement of compliance to the revised WCO Revised Kyoto Convention (RKC) standards by instruments of accession deposited by many African States and with support from the WCO, the majority of the Customs Management Systems (CMS) have been upgraded and enhanced by the introduction of risk management modules, applying mainly selective and random rules. During the last decade, various risk assessment systems have been implemented, mostly by private firms specialised in the area of customs operations and using various targeting methodologies. The main ones to be considered are as follows:

1.2 Rules-based Approach

A. Selectivity

The selectivity implies systematic orientation of customs declarations to a specific control channel (e.g., physical inspection or fast-track) based on pre-defined rules applied to a set of specific criteria/characteristics related to a transactions. For instance, imports of specific HS codes under certain regimes from *Country 1*, *Country 2* and *Country 3* or submitted by Authorised Economic Operators (or Green List Importers).

The selectivity rules are only efficient when they are based on special intelligence (i.e., based on information which has been gathered, analysed, categorised and refined) and when they are continuously refreshed to reflect the most recent behaviour and fraudulent practices. However, in practice, selectivity rules are sometimes defined, as based on raw or untested

information, often conflicting and most of the time static or only occasionally updated by Customs Administrations. This leaves room for arbitrary selectivity and provides an opportunity to non-compliant operators to adapt their behaviour and by-pass customs controls.

B. Frequency

This approach consists of systematically controlling any transaction that involves an economic operator, a specific type of targeted goods or a country (of supply or origin) which has no prior record in the customs database. This allows customs to ensure that knowledge is created or data collected for any new operator, HS code or route, which is critical for an effective risk assessment in the future.

A frequency methodology or approach requires an effective management of the economic operator's database. When importers or clearing agents are free to create as many Taxpayer Identification Numbers/TIN as they want, as is the case in some African states, it generates a lot of duplication in the databases. The effect of this is that the system is unable to clearly identify a "true" new player, and unnecessary interventions may be proposed.

C. Statistical Approach

This approach uses quantitative techniques to compute a risk score on trade transactions based on the historical results and findings from customs controls (Classification, Valuation, Scanning, Inspection ...). Each characteristic of Customs Declaration (Criteria) is scored and weighted based on the historical fraud data through econometric estimation. Any new transaction will be given an overall score by combining the weighted scores of its characteristics. The computed score is thus compared against predefined acceptability thresholds (customs capacity/trade facilitation target) in order to define the appropriate action to be performed. This approach relies on fraud feedbacks recorded, back to update the scores,

which will be used to predict the risk of the future transactions. Also new threats discovered during control are automatically integrated into a score computation process to identify new patterns of risk.

The application of a statistical approach in Customs RM brings many advantages over the classical selectivity that is commonly used within Customs RM solutions. Classic examples may be:

- Increased objectivity by removing human appreciation and reducing arbitrary controls.
- More accurate results by taking account of the daily controls, to continuously update the scores of the transactions and further consider fluctuating/changing non-compliance patterns.
- Impossibility for decoding by the economic operators or traders.

Statistical Approach relies on data which is required to be organised and processed correctly in order to draw some statistical robust risk patterns. The lack of systematic and accurate fraud feedback may constitute an issue for concern when applying this approach.

D. Random Approach

This approach applies a pure random selection methodology, used in particular to regulate Customs controls. When this approach is combined with the above-mentioned approaches, it could be configured in the manner to only select a small percentage of low risk transactions for control (for instance redirect a small portion of Fast-Track transactions to scanning or physical examination) and therefore dissuade compliant importers from fraud attempts. The positive results obtained from random selection are fed back to refresh the risk scores and also are used to evaluate the performance of the others used.

The above approaches are not exclusive and should be combined in an appropriate manner to obtain an effective and customised risk management system that helps Customs

to have complete control of its operations and be able to effectively reduce its clearance lead times without increasing the risk to the national security and prejudicing state revenue.

2.0 LESSONS LEARNED AND RECOMMENDED IMPLEMENTATION STRATEGY

Lesson 1: Adopt a “change management” approach

The introduction of a risk management (RM) project or initiative needs to be managed from both technical and human perspectives (not only from an internal Customs perspective but also from an external / clearance process stakeholders’ viewpoint). This is to increase the likelihood of delivering the intended results and outcomes. Most of the time, Customs administrations are able to ensure successful installation of RM systems.

However they struggle to ensure the acceptance, adoption and efficient utilization of the system by personnel who have to adjust their behaviour and skills to perform their job differently as a result of the change. Integrating a Change Management approach in a RM implementation project ensures that all perspectives are covered and process dimensions are considered at the earliest stage possible.

A. If you fail to plan, you plan to fail

As with any project, RM implementation within Customs starts with a clear definition and agreement on the precise objectives (i.e. purpose, aims, scope, deliverables, timescale, budget, team, etc.). However, its success and capacity to deliver the expected results and benefits depends strongly on the early consideration and management of barriers linked with personnel aspects. It is essential to prepare people for the change within their operational environment. An introduction of RM systems “*shall be carried out in consultation with all relevant parties directly affected, to the*

greatest extent possible” (WCO Revised Kyoto Convention (RKC) – Chapter 7). The following recommendations are critical in this process:

- Take time to identify the different departments, the offices and people affected by the project and the risks associated with their potential reactions to this change.
- Spend time with the Senior and Middle Management to truly build understanding and buy-in to the change effort. Their commitment and active leadership are key criteria to move the entire organisation in the same direction (Wallace-Hulecki *et al.*).
- Initiate workshops and briefing events to share and sell the vision of the project in values-based terms, in order to get the maximum number of people to commit, or at least understand the need for change.
- Collect and assess people’s perceptions and feelings about the change and consider the findings to build people-centred plans to support the change (education, training, communication, incentives ...).

Do not underestimate resistance to change. Set out what needs to be in place from a people perspective before the formal kick-off of the project. It includes analysis and possible revision of the operational process and procedures, establishment of a clear communication plan and sometimes amendments to national legislation to provide the legal basis for risk-based operations, enforcement, rewards and incentives.

B. Set up joint implementation committees in order to drive institutional reorganisation

Successful implementation of RM within Customs administrations requires the establishment of a structured management organisation to help develop a mutually beneficial relationship between the project implementation team,

Customs senior executives and the resources impacted by the changes in procedures and systems. This is essential in order to create a co-ordinated workforce capable of moving the entire organisation in the same direction. This management organisation should be representative of all the departments implicated in the project and include representatives from all levels of staff, from management through to officers working at the grassroots level. This will also contribute to build sustainability for the future.

A successful implementation and ongoing management of a RM solution is best supported by the following RM management structure:

- 1. A Steering Committee:** This is responsible for the overall supervision of the RM implementation and for providing assistance to all other sub-committees and units involved. Specific tasks could include: validation of proposals, mobilising resources when required, enforcing decisions and dealing with resistance to change. This committee is usually chaired by the Customs Commissioner (or his Deputy) and

It should be noted that the Steering Committee is usually the first group that shows signs of losing interest/focus. In most of the RM projects, it has been noticed that the real risk of loss of impetus of this group is expected during the first year. Thus, it is important that management retains and maintains employees, engages and keeps them committed. Therefore, the success of the Project is foundationally based on Senior Management's interest and participation.

Keeping the Steering Committee informed through regular meetings and status reports, organising seminars to communicate positive emotions such as ongoing progress, achieved objectives, perceived outcomes and future milestones are rules that have been applied successfully in the past to keep this key group engaged.

with the Head of the different departments as members with an active participation from the service supplier. It is the ultimate decision making authority.

- 2. An Operational Committee:** This is generally the "guiding team" composed of the Project Management Team and representatives from the key Customs functions with the right mix of skills and operational levels to drive change and influence the others. This committee is responsible for the practical implementation of the strategic objectives of Customs (such as Trade Facilitation, Revenue Collection and Security) within the RM project and will also assist in managing the inevitable ambiguity and uncertainties that will often appear.

Customs administrations in Africa are structured in what can best be described as a "silo" organisation, where each "silo" thinks and works independently, often without paying enough attention to the needs of other departments and the synergies that can be achieved by working in close co-ordination with each other (the "it's not my job" mentality). When it comes to moving forward with risk management decision making and planning within the Operational Committee, it is frequently difficult to break the normal working habits of people who only consider their own specific area, and are not looking at the broader obvious goals and objectives. Therefore, this committee is sometimes inefficient in achieving its main objective, which is to make co-ordinated decisions across the "silos" and move the project forward in a productive direction.

Clear commitment from Senior Management and the promotion of inter-department communication and co-operation is a mandatory condition to break the organisational silos barrier.

- 3. A Risk Management Unit:** Responsible for the maintenance and operation of the RM System (analysis, configuration, monitoring). The unit is also in charge of gathering intelligence information and consolidating

a dedicated national fraud database, providing RM training and awareness and regularly producing RM related operational and statistics reports. Considering the level of sensitivity of systems and information managed by this unit, it is recommended to be directly under the supervision and control of the General Commissioner or be attached to the Customs Intelligence (CI) & enforcement department and be composed of resources with very specialised skills and credible ethical moral character.

Carefully plan rotation of the Risk Management Unit:

Staff rotation is a natural discipline of Customs administrations, however, for this unit, rotation must be carefully planned so as to not affect the continuity of its activities. Ideally, the personnel of this unit should be appointed for the long-term because of the length of time it takes to reach an acceptable level of competency (i.e., there is a reasonably long learning curve [Laporte, 2011]). Before moving people into this unit, an appropriate training plan should be designed and executed to ensure a consistent handover. In addition, the new employee should be assigned to a mentor or supervisor to ensure questions receive the appropriate consideration and the correct answers and systems are correctly operated.

C. Appoint an experienced service provider to provide technical assistance

The use of technical assistance services regarding risk management systems is commonly recognized as an enabler for African countries to invest more quickly and confidently in Customs modernisation. The scope of technical assistance services should be carefully defined and aligned with Customs authority objectives,

capacity and budgets, and embrace global trade facilitation objectives.⁴

The service provider should have significant experience and a proven track record in implementing risk management solutions in similar Customs environments. It should have the methodology, as well as the skills and tools to ensure a successful implementation.

The service provider should have the capacity to support Customs authorities to adapt the management of their human resources: for example, to identify or recruit staff having the technical and soft skills to be in charge of risk management matters, and to help define clear job descriptions for the long-term assignments.

The utilisation of risk management solution providers, therefore, constitutes a solid and practical approach to give a considerable boost to a RM implementation project and deliver quick results (quick-wins) to gain confidence and buy-in from customs personnel affected by the project.

Lesson 2: Implement a consistent and automated Risk Management solution

Efficient RM implies the use of automated systems that implement dynamic risk assessments, drive control operations and collect and integrate meaningful feedback. To achieve such objectives, the systems and procedures put in place with the support of the technical assistance services providers should comply with the following minimum requirements:

A. Combine different risk modelling approaches

A number of different studies [WCO2010, Laporte, 2011], support the requirement that an efficient RM should combine a number of different risk modelling approaches including (but not limited to) statistical modelling (e.g., econometrics and scoring), rule based targeting and random selection.

⁴ The 2013 WTO Bali Agreement as an example.

B. Enforce a Unique Tax Identified Number

Submitting Customs Declarations with different Tax Identifier Number (TIN) is one of the trendy tactics used by importers to escape TIN controls tracking and assessments. On the other hand, the success of automatic RM highly depends on their capacity to uniquely identify the importers.

Ensuring that each stakeholder in the international trade chain has a unique number, which is mandatory for Tax purposes and also for risk management purposes, to ensure linking behaviours (frauds practices) to the appropriate declarants. One of the first measures to be addressed when implementing RM projects, consists of “cleansing” TIN databases through the consolidation of information from different sources and using specialised tools to detect the importers using different TINs.

C. Limit and track human interventions

The system should allow for human intervention in changing system parameters to integrate external intelligence information and alerts (e.g., define new selectivity rule,s etc.) however, such interventions should be effectively controlled and authorised, i.e., limited, protected and documented for auditing purposes (track who has done what and when).

D. Provide for reliable and centralised data

“Risk management” systems, as with any system will behave in the same manner following the “garbage in – garbage out” principle. There is a clear need to organise a wide range of data spread on the Customs cloud, part of it which is neither structured nor systematically recorded and, therefore, not directly exploitable by computer systems. Statistical based RM systems require the availability of formatted and reliable data that is systematically recorded, consolidated and analysed to update the system parameters.

To ensure optimal utilisation of risk assessment methods, Customs administrations are recommended to closely work with the

systems suppliers at the stage of data elements identification and validation. RM specialists should conduct a preliminary analysis of the consistency and pertinence of the data available for risk management purposes, as such an exercise often leads to a “gap analysis”, identifying the additional data, that may need to be gathered, recorded and processed.

E. Adopt a consistent approach to the management of feedback information

The collection and storage of structured fraud and accurate information feedback is a critical element of the RM processes. The fraud database indeed contains the historical records of Customs violations and offences discovered by the Customs officers through physical inspections and other types of controls carried out in the context of their daily operations. This information is essential to allow the RM system to adjust its parameters for an efficient assessment of the level of risk, and for the assignment of the appropriate intervention channel for each new Customs declaration.

Inaccurate feedback information is “misleading” not only for the system but also for those utilising it, to an extent where credibility and reliability may be raised as serious concerns.

In many cases, the fraud information available in the existing Customs fraud databases is not exhaustive and precise enough⁵, to conduct effective risk analysis. This leads to the development and implementation of various adhoc tools to improve feedback and populate the RM fraud database with more refined information.

Dynamic risk management systems using a statistical approach require a high volume of good quality data, which can be accessed in real-time. A lack of exhaustive and high quality frauds feedback, coupled with an inability to have access to this information at the earliest possible opportunity, could have a serious impact on the

⁵ Complete description of the goods to such a level that allows a proper identification, tariff classification and valuation of goods for Customs purposes.

implementation of the RM solution. In this case, some measures must be taken to implement mechanisms which guarantee continuous and timely flows of accurate information between the Risk Management Unit and Customs frontline offices.

F. Ensure usability of the system by the End-Users

Most of the solutions available in the market provide user interfaces that allow Risk Officers to manage basic selectivity rules, however, when it comes to more complex risk assessment rules configuration/calibration, the involvement of IT technicians and statistical experts become mandatory.

If Customs end-users (i.e., generally non-technical personnel) are not comfortable with the use of the RM system because of the complexity or the “black-box” effect, the system will not be continuously refreshed and the expected outcomes will not be achieved. Chapter 7 of the WCO Revised Kyoto Convention (RKC) recommends that *“Customs shall apply information technology to support Customs operations, where it is cost-effective and efficient for the Customs and for the trade”*.

A good RM solution should have a user-friendly and intuitive interface that allows not only statistical experts but also standard Customs users to understand how the statistics modelling works and what the impacts will be of changing some parameters or rules. Highly complex quantitative risk assessment methods should be very simple to use in order to quickly build the user experience.

Lesson 3: Ensure the existence of a minimum level of Telecommunications infrastructure

The deployment of an efficient RM also relies on an appropriate telecommunications infrastructure, a lack of which can be a real concern for project implementation as the quality of communications can highly impact the

systems architecture and operational modes. The availability of a reliable telecommunications infrastructure allows all border posts (ports, land borders) to centrally process declarations in real-time using the same risk management configurations. Feedback is collected from these remote posts, consolidated and centrally processed to adjust the system parameters.

When the telecommunications infrastructure is poor (low bandwidth and low reliability), which is the case in many African countries, Customs may have to implement distributed system architectures where a standalone Customs Management System and risk management solutions are deployed.

Operating under poor communication infrastructure necessitates the implementation of alternative infrastructures that allow users of the frontlines offices to access the central system if the network is available and automatically switching to the standalone solutions if not. Such a context implies the creation of a daily batch transfer of data between the remote and central systems.

Lesson 4: Assess RM projects through Key Performance Indicators (KPIs)

KPIs have proved to be an effective performance management tool. Customs Management has to ensure that KPIs have been cascaded down to all employees and that every employee relates his/her role to the basic objectives of the department, therefore, facilitating the fulfilment of strategic objectives.

While defining appropriate KPIs could be an easy task, (e.g., adaptation of KPIs applied by other Customs administrations) their measurement has proved to be much complex as the tendency is often to rely only on statistics extracted from the system.

Most KPIs are, therefore, oriented to the measurement of the program’s impact on trade facilitation and revenue protection and defined through processing channels. Examples include but are not necessarily limited to:

- Green channel for low risk and AEO transactions;
- Yellow channel for medium risk cargoes requiring documentary checks;
- Red channel for high risk transactions that are sent to the x-ray scanner and/or physical examination;
- Blue channel for transactions selected for Post Clearance Audits.

The RM system should provide flexible reporting capabilities that should allow accurate measuring of the KPIs and represent them in friendly manner. Below are some examples of KPIs that could be considered as part of an RM solution implementation:

- The distribution of cargoes across the different processing channels and its alignment with the objectives;
- Resources usage rates (number of cargoes controlled, scanned, or inspected) versus revenue generated;
- Release time for low risk cargoes that will allow administrations to measure their trade facilitation targets;
- Hit rate on high risk cargoes that illustrates the system effectiveness in targeting the really risky transactions;
- The additional revenue generated from cargoes showing discrepancies after inspection;
- Percentage Customs audit success rates for risk based post clearance audit targeting;
- Percentage Customs and border protection decisions overturned through external appeals;

These KPIs can be used to maintain the right balance between the availability of resources for control and the risk of loss of revenue knowing that in most cases, especially in Africa, that revenue always take precedence over facilitation.

Lesson 5: Proceed with a phased and progressive Implementation

In many cases, the identification of the risk criteria is carried out “manually” and relies on the Customs officer’s experience and judgement. The selectivity rules may be defined by a committee or group of people and then transmitted to an IT team for their implementation inside the system. The approach fully relies on human intervention and judgement. While not completely inappropriate and in many situations unavoidable, it fails to take advantage of all the information captured in the CMS database and to adapt in real time to new forms of Customs fraud, thus being a risk in itself.

To overcome such challenges, it is recommended to adopt a phased and progressive implementation of a comprehensive RM system supported by a training and capacity building program that allows for a gradual increase in the technical and management skills of the Customs staff.

This is particularly valid when it comes to the application of the statistical methods that have the capability to efficiently predict and detect declarations containing infractions, yet remain highly dependent on the volumes and quality of the data stored in the systems.

The implementation of a robust RM solution within Customs involves an incremental rollout of modules through the activation of advanced system features, which requires committed involvement from both Customs administrations and the risk management solution supplier.

Ideally the setup of efficient RM principles and systems within a Customs Administration requires a four phased and incremental implementation that take at least three years including an intensive and continuous training and capacity building programme.⁶

The four proposed phases are as follows:

1. The first implementation should commence around established risk

⁶ Laporte also considered that a period of two to three years is necessary to develop such a phased risk management system within African context [Laporte - 2011]

profiles (importers, commodities, countries...) using the knowledge of Customs officers and other information gathered on the field. The collection of basic feedback information (fraud observed or not) is implemented using adhoc fraud collection tools.

In parallel, other activities should be undertaken:

- Experts should analyse the quality (unformatted, not consistently recorded, not detailed enough), the consistency and collection channels of the available data and information; such analysis often leads to specifications to implement changes within the CMS that allow the required data to be recorded;
 - Risk management committees should be implemented and the capacity building program launched;
 - Key Performance Indicators and their means of measured identification should be defined.
2. The system should then evolve to combine risk profiles using weighted criteria and computed based on statistical methods. The feedback information is enriched by the qualification of the value of the fraud and related penalties. At that point, certain of the Key Performance Indicators can begin to be computed and reported.
 3. When the database is populated with more reliable and complete data, the algorithms using econometric scoring techniques can be activated. At this stage, the system is still not sufficiently informed about the nature of the infractions confirmed. The information revealed is the presumption of infraction, whereby the control officers must define the nature of the infraction. A Risk Profile Reporting module should be implemented to show dynamic reports on volumes, trends and analysing risk profiles, e.g., the

Top 10 riskiest importers or commodities and their related transactions and fraud behaviour. The CMS should be updated to allow all the information required by the RM solution to be recorded in a consistent manner.

4. The final stage implies, the implementation of a comprehensive solution, including an integrated Customs Information System allowing for the recording of the infractions, their type and impact, along with an executive reporting system showing clearly identified performance measurement indicators.

Lesson 6: Plan for a significant Capacity Building Program

All trade-related studies and organisations recognise that Capacity Building and Training is an important component for the successful implementation of RM within Customs Administrations. As emphasised in the recent risk management surveys performed within WCO Members, most Customs administrations are facing difficulties in achieving the practical implementation of the Risk Management Programme (Hintsa *et al.* 2011).

The Training and Capacity Building Package (TCBP) content should be defined following an in depth "Training Needs Analysis" (accurate diagnosis of developmental needs as stated by WCO) which often encompasses:

- Sponsoring awareness campaigns for the entire organisation;
- Study tours of similar environments to share experiences and best practices;
- Technical workshops on RM challenges, approaches and benefits for the staff indirectly implicated in the implementation and operations of the RM Systems;
- Development of soft skills of RM teams;
- Regular training on RM approach, methodologies and tools supported by systems demonstration and pilots;

- Organisation of “Train the trainer” sessions.

Ideally the training should go beyond the classical functional and technical training parameters and encompass the development of cross-functional skills of the Customs staff to support the change management process. Training areas identified by the Training Needs Analysis could include (but are not necessarily limited to) the following:

- Trade Facilitation Framework, WTO and WCO Standards;
- Risk Management Principles, approaches and best practices;
- Change Management;
- Risk Management Systems Tools and methodologies;
- Information security;
- Project Management;
- External Co-operation, Communication and Partnership;
- Crisis Management.

The TCBP should be a continuous process to ensure constant refinement and improvement. Other complementary measures should also be undertaken to enforce the RM policies and procedures:

- Create Specific Operational Procedures to enforce compliance with Risk Management System Orientations/recommendations;
- Develop Risk Management Course as part of training curricula and program for customs student;
- Establish permanent communication between Risk Management Units and Front-line Offices;
- Use WCO framework of principles and practices on Customs Career Development and training as basis to review African Customs administrations’ current practices;
- Adopt more holistic approach to Customs capacity building at a regional level to encourage mutual assistance and best

practices sharing. This also contributes positively to building regional synergies.

CONCLUSION

In the current economic environment defined by globalisation, significant trade growth (to and from Africa, and also within Africa) and an exhilarating pace of change, the implementation and designing of a Customs risk management system is no longer a ‘nice’ to have but a stringent necessity⁷. Such systems serve both facilitation and control objectives.

Deploying a Risk Management system and implementing the associated processes and procedures have the potential to transform an organisation in a radical way. However in order to achieve the full potential, it is important to strategically embark on a holistic approach thus going as far as taking into consideration not only the impact on the Customs organisation, but also the impact on the environment in which Customs operates.⁸ This requires customs to develop a real “Customs-to-Business” partnership with the trading community and “co-operative arrangements with other government agencies” (WCO SAFE Framework of Standards). Also, effective RM Systems are additionally supported by “a compliance measurement strategy” and strengthened co-operation between Customs administrations “to conclude mutual administrative assistance agreements” allowing for the enhancement of their control (WCO Revised Kyoto Convention (RKC) – Chapter 7).

Indeed, Risk Management globally and within African states, should consist of a balanced combination of policies and strategies covering the systems (tools) as well as people, processes and procedures (collecting, storing and managing data and data intelligence). All

⁷ WCO Revised Kyoto Convention (RKC) Chapter 6

⁸ From a Customs perspective it is important, for example, to understand not only the impact on its own operating costs and increase efficiency in the use of resources but also the impact on the speed of the clearance process and thus on the cost of doing business for the local trading community.

the Customs administrations in Africa have come to appreciate the necessity and compliance requirement to introduce such systems, and to facilitate trade.

From experience and in other global studies, it has been noted that the implementation in practice is met with varied levels of success, thus no administration appears to have Risk Management as a masterpiece of their management system, neither on strategic nor on operational level [Hinsha, 2011]; mostly due to inadequate trade-oriented policies, lack of appropriate Customs infrastructure (including telecommunications and IT information systems), defective RM programme implementation, and inadequate staff skills to support this kind of project.

Nevertheless, many WCO members in Africa have initiated at national level and in some cases at regional level a number of major reform and modernisation initiatives for their Customs administrations, which are more aligned with the WCO Revised Kyoto Convention (RKC) global standards. For those countries, implementing a Risk Management System as driver of their operations in synergy with the other trade facilitation instruments (i.e., multi-facet approach to trade facilitation) and taking into account the recommendations proposed by the study, will result in significant positive outcomes well beyond the Customs organisations boundaries, thereby positively impacting on all sectors of the economy and benefitting international trade.

In this regard, the memorandum of understanding signed between the WCO and the African Development Bank (AfDB) on January 2012 constitutes a great opportunity for African Customs administrations to secure both technical and financial support to capacity building initiatives required for such modernisation programmes. A well-planned and focused strategic implementation is the key to deliver successful RM systems in Africa.

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ANNEX: Cotecna's experience

Cotecna⁹ was the pioneer in 1999 in implementing a computerized Risk Management System based on a statistical approach alongside non-intrusive, state of the art cargo Scanning facilities as an integrated component to Customs operations.

Cotecna Risk Management, supported by CRMS®, uses an approach combining econometrical modelling approach with selectivity, frequency and random rules. This combination creates an effective and customised risk management system that helps Customs to have complete control of its operations and be able effectively reduce the number of physical examinations without increasing the risk to the national security and State revenue.

Cotecna initially implemented its CRMS® as part of contracts with governments to carry out Pre-shipment and destination inspection (PSI/DI) and scanning services. Based on the Advanced Cargo Information (ACI) provided to the PSI/DI schema, CRMS® assessed the risk and transmitted electronically the risk channel recommendations to the Customs Management System (CMS) allowing Customs to plan their actions. Two (2) weaknesses were observed:

1. The coexistence of two RM Systems which did not apply the same methodology (also emphasised by Geourjon et al., 2012): Only the goods subjected to PSI/DI services are assessed by CRMS®. The consignments outside PSI/DI were assessed by Customs CMS Selectivity Module which uses basic risk Assessment methods.
2. The fact that CRMS® was not directly operated by Customs within their own environment. In certain cases, this lack of ownership feeling by Customs increased the level of non-application /overruling of CRMS recommendations by the front-line offices.

⁹ Cotecna provides Trade Facilitation and Security Services to governments – www.cotecna.com

Learning from the experience accumulated in implementing risk management solutions in nine (9) countries across Africa, this innovative approach has, over the years, evolved into a multi-modular portfolio with a stand-alone computerised risk management engine operated within Customs and by Customs as one of its most technologically advanced components.

In the latest generation of CRMS®, Cotecna has built a RM solution with a multi-layered approach¹⁰ to the risk because the nature of the risk and the likely impact should drive decision on whether an action or counter-measure is considered appropriate.

¹⁰ Cotecna RM System: Assesses each strategic area of risk separately in order to recommend more precise action; Provides risk level not only for the whole Customs declaration, but also per item of the declaration for more targeted work approach (optimisation of Customs operations).