

Risk management systems in Customs: the Ukrainian context

Oleg V Komarov

Abstract

The foreign economic and customs policy of states and unions, influenced by globalisation, integration processes and the associated challenges of our times, is a changing dynamic, which through its constant transformation and adaptation is leading to new economic and trade conditions. Together with the development of customs control technologies to support the policy, schemes designed to circumvent such controls have also evolved. Customs authorities and other border agencies are therefore seeking to manage the associated risks by way of sophisticated risk management systems (RMS). This paper examines the systems introduced in the Ukraine and the progress made.

1. Introduction

The increasing complexity, speed, and volume of international trade, fuelled by the technological advances that have revolutionised global trading practices, have significantly affected the way in which customs authorities carry out their responsibilities. As a consequence, many administrations have implemented disciplined and structured approaches to managing risks (Widdowson 2005, p. 92).

The Ukraine is no exception. It introduced risk management principles into its customs control regimes in 2005. At the time, the government realised that it was necessary to adopt a modern approach to customs management in order to be recognised as a reliable stakeholder that provides a safe link in the international supply chain and, accordingly, support Ukraine's integration into the world's economic community.

The *Association Agreement between the European Union and its Member States, and Ukraine* of 21 May 2014 (the 'Association Agreement'), established a political and economic association between the contracting parties. Chapter 5 of the Association Agreement deals with Customs and trade facilitation. Article 75 provides that parties 'recognise that utmost importance shall be given to legitimate public policy objectives including trade facilitation, security and prevention of fraud and a balanced approach to them' and 'agree to reinforce cooperation in this area with a view to ensuring that the relevant legislation and procedures, as well as the administrative capacity of the relevant administrations, fulfil the objectives of effective control and support facilitation of legitimate trade as a matter of principle'.

Article 76 deals specifically with trade and customs legislation. It requires parties to have stable and comprehensive trade and customs legislation and 'that provisions and procedures shall be proportionate, transparent, predictable, non-discriminatory, impartial and applied uniformly and effectively'. In particular, legislation and procedures should, among other things, 'protect and facilitate legitimate trade through effective enforcement of, and compliance with, legislative requirements', 'lead to greater efficiency, transparency and simplification of customs procedures and practices at the border', 'apply modern customs techniques, including risk assessment, post clearance controls and company audit methods in order to simplify and facilitate the entry and release of goods', 'ensure the nondiscriminatory application of requirements and procedures applicable to imports, exports and goods in transit', apply relevant international instruments in the field of Customs and trade including those developed by the

World Customs Organization (WCO), the World Trade Organization (WTO) and the United Nations (UN), and take the necessary measures to implement the provisions of the *International Convention on the Simplification and Harmonization of Customs Procedures, as amended* (the Revised Kyoto Convention 1999).

It is clear that by entering into this agreement, Ukraine has undertaken a series of significant international obligations. In addition, Ukraine has ratified the WTO Trade Facilitation Agreement (TFA), the obligations relating to risk management of which are set out in Article 7, sub-para. 4, which provides that:

- 4.1. Each Member shall, to the extent possible, adopt or maintain a risk management system for customs control.
- 4.2. Each Member shall design and apply risk management in a manner as to avoid arbitrary or unjustifiable discrimination, or disguised restrictions on international trade.
- 4.3. Each Member shall concentrate customs control and, to the extent possible other relevant border controls, on high risk consignments and expedite the release of low risk consignments. Each Member may also select, on a random basis, consignments for such controls as part of its risk management.
- 4.4. Each Member shall base risk management on assessment of risk through appropriate selectivity criteria. Such selectivity criteria may include, *inter alia*, HS code, nature and description of the goods, country of origin, country from which the goods were shipped, value of the goods, compliance record of traders, and type of means of transport (WTO 2013, pp. 8-9).

2. Key issues relating to risk management

2.1 What is risk?

Why is the mastery of risk such a uniquely modern concept? Why did humanity wait the many thousands of years leading up to the Renaissance before breaking down the barriers that stood in the way of measuring and controlling risk? (Bernstein 1996, p. 11).

Older civilisations had developed quite different techniques for dealing with analogous problems, and thus had no need for a word covering what we now understand by the term 'risk'. For example, in ancient oriental maritime trade there existed what could be described objectively as risk awareness accompanied by corresponding legal institutions. Indeed, the concept of risk finds significant application in the fields of navigation and trade, with maritime insurance representing an early instance of planned risk control (Luhmann 1993, p. 9).

So, what is the risk in the term 'risk management'? According to Widdowson and Holloway (2011, p. 100) 'it is best defined as the chance of something happening that will have an impact on organisational objectives'.

An analysis of existing definitions of the term 'risk' in the context of customs administration and regulation has, however, revealed a considerable degree of inconsistency. This has been caused by the multidimensional and complex nature of the concept. Generally, its nature is characterised by such elements as indeterminacy and probability, predictability and suddenness, divergence and proneness to conflicts, choice, alternativeness or variability, danger and threat, loss, negative profit or consequences, success and failure, event, situation, etc. Causal-investigatory links and interdependency of such characteristics and qualitative descriptors, as well as specific areas of research in this area, determine and contribute to the base knowledge within the 'riskology' theory.

Customs risks are particular as they are characterised by the nature of the environment in which they arise and their specific forms of implementation/realisation, and in their broadest sense they are defined as the potential of non-compliance with customs laws (WCO 1999a). The WCO also refers to risk as the 'effect of uncertainty on objectives' (WCO 2011, p. X), apparently leaning towards the terminology of international standards (for example, ISO 31000:2009).

At a regional level, taking into consideration the European integration of Ukraine, it is pertinent to note that, according to the Community Customs Code, 'risk' means the likelihood of an event occurring in connection with the entry, exit, transit, transfer and end-use of goods moved between the customs territory of the Community and third countries, and the presence of goods that do not have Community status, which 'prevents the correct application of Community or national measures', 'compromises the financial interests of the Community and its Member States', and 'poses a threat to the Community's security and safety, to public health, to the environment or to consumers' (European Union 2013). Similarly, according to the Customs Code of Ukraine (Customs Code), risk refers to 'the probability of failure to comply with the customs legislation of Ukraine' (Verkhovna Rada of Ukraine¹ 2012).

It should be noted that the realisation of risk can result in positive, negative or neutral outcomes. Not only can the outcomes differ, but they may even be diametrically opposed, and consequently the cause/effect relationship between risk and loss is often ambiguous. Also, customs law violations do not necessarily represent any danger in terms of direct loss, damage or harm. However, the fact that such violations occur tends to undermine principles such as law and order, and the rule of law itself, and in this context it constitutes a risk which needs to be addressed. Note also that a person becomes one of those affected by the consequences of the risk occurring as he or she (intentionally or negligently) encroaches on social values and relations.

At the same time, intentional violation of customs law constitutes a risk for the offender, the risk being the prospect of being caught and penalised if the offence is uncovered. Notwithstanding, the incentive of better profit margins due to reduction of customs duties and tax avoidance, counteracts the risk of being caught. This phenomenon appears to be a central factor for customs authorities in determining the nature and scope of customs control as they attempt to ensure compliance with customs laws.

It should also be noted that customs authorities also generate risks. This occurs when a violation is committed with the support of or directly by customs officials or because of negligent or poor performance in carrying out their functions and responsibilities. In this context, the modern management paradigm requires the practical implementation of a combined approach that presupposes management not of individual, separate risks but the whole risk environment including external and internal aspects. The latter can be described as bureaucratic risks in customs administration.

By clearly differentiating government interests (that is, customs interests) from the commercial interests of foreign trade participants, the concept of 'risk' can be more clearly defined. Risk is the danger of failing to achieve the objectives of customs authorities, which poses challenges in the area of customs and trade security, as well as other areas such as public values.

Related to the concept of risk is the notion of a 'risk situation', which provides additional insight into a broader understanding of the term 'risk'. A 'risk situation' can be defined as a synergy of different circumstances and factors that create an environment and favourable presupposition for risks to occur.

2.2 What is a risk management system?

Management may be regarded as a function which is orientated to adapt to variable conditions of the external environment to achieve organisational objectives, taking into account corresponding risk factors. It involves four components: object, subject, management aims, and mechanisms of authoritative influence.

In general, management is a system of means and facilities of purposeful influence of the individual controlling objects under their control. Given this, control is one of the basic functions of customs management with both external and internal components. Such control is directed to the implementation of normative requirements, and includes the application of legal coercive measures.

A system may be regarded as a well-structured combination of elements, parts, components and items, joined with organisational links through determined common indicators, criteria, etc.; and risk management can be considered to be a complex multi-level system which includes:

- supranational level which provides collective trade security based on the activity of international organisations, trade and economic communities, as well as international standardisation and unification of risk management technologies, its methodical and methodological support
- national level under which the unification and implementation of international norms and standards occurs, and according to which the system-wide, key principles of risk management are set
- institutional level which foresees the presence of policy, strategy, mechanisms and procedures of institutional management, focused on goal achievement and taking into account corresponding risk factors
- individual level which is characterised by the presence of the human element, by noting that a person can simultaneously be an object and a subject of risk management and an intermediary of personal and public risks.

A common characteristic of customs work is the high volume of transactions and the impossibility of checking all of them. Customs administrations therefore face the challenge of facilitating the movement of legitimate passengers and cargo while applying controls to detect customs fraud and other offences (UNCTAD 2011, p. 39). It is accepted that managing risk presents challenges as Widdowson (2005, p. 92) points out, ‘The more traditional procedures include physical border controls over the movement of goods and people consisting of documentary checks and physical inspections aimed at detecting illicit trade. The introduction of such controls constitutes a form of risk management, but not necessarily an effective or efficient one’.

A Risk Management System (RMS) replaces total control and becomes a new evolutionary stage in the development of customs control technologies. It may be defined as a range of measures designed to support selectivity within the scope of customs control to safeguard customs regulatory interests and state security (and, from a regional perspective, the security of member states). It represents an efficient mechanism which is intended to serve the interests of all participants in customs relations – government agencies and foreign-economic activity participants. As such, it satisfies the required principles and standards of modern customs administration.

For example, according to the WCO’s *SAFE Framework of Standards to Secure and Facilitate Global Trade* (SAFE Framework), a customs administration should establish a risk management system to validate threat assessments and formulate targeting decisions. According to the WCO (2015, p. 13) customs administrations should develop automated systems based on international best practice that use risk management to identify cargo and/or transport conveyances that pose a potential risk to security and safety based on advance information and strategic intelligence. Further, in accordance with the Revised Kyoto Convention, Standards 6.2 and 6.3 of the General Annex, ‘Customs control shall be limited to that necessary to ensure compliance with the Customs law’; and ‘In the application of Customs control, the Customs shall use risk management’ (WCO 1999a).

The scientific community, however, does not provide an agreed definition of a ‘risk management system’. Often, an idealised, utopian position is prevalent when such a system is mistakenly seen as a ‘panacea’ for all risks connected with customs control and clearance. Nowadays, an RMS in relation

to the activities of customs authorities is predominantly viewed in the context of the application of an automated system to select high risk transactions and determine the form and scope of customs control over them. The fact that such a system of automated selection is only one of the ways of customs control is often ignored.

In our opinion, it is not appropriate to rely solely and exclusively on the application of an automated system of risk management. Such a system is only one of the instruments for risk analysis and evaluation which helps to check relevant electronic documentation. At the same time, the importance of such automated systems should not be underestimated. Thus, we define the RMS as a set of instruments of automated, manual and combined customs controls, based on the principle of selectivity within the scope of customs control required to ensure compliance with customs law.

When speaking about RMS, commentators often refer to the support system for customs decision making, which aims to minimise risk. However, this rather diminishes its importance. Undoubtedly, an RMS includes decision-making processes, however this does not restrain its functions. It also provides additional monitoring, estimation of results, identifying causes, elimination of consequences, and so on. Hence, the application of RMS encompasses both a narrow and broad context of risk. In applying risk management in customs control, customs authorities manage risks in the narrow sense as the potential for (transactional) non-compliance with customs laws, and in general, the application of RMS is aimed at minimising risks in the broad sense as the threat of non-achievement of the objectives of customs authorities.

3. RMS introduced by Ukrainian Customs

The forms and scope of controls, sufficient to ensure that the customs legislation and international treaties of Ukraine are observed at the time of customs clearance, are selected by the customs offices (customs posts) on the basis of the RMS, and may not be determined by other public authorities, nor may their officials engage in applying customs controls.

The revenue and customs authorities analyse, identify and assess risks, develop strategies, and take action aimed at mitigating risks, assess their efficiency and follow up their application. These authorities apply the RMS to identify goods, means of transport, documents and persons that are subject to customs supervision; customs controls applicable to such goods, means of transport, documents and persons; and the scope of customs supervision required. In other words, RMS control comprises risk assessment by analysing, (including through information technology), transactions to select the form and scope of customs supervision, sufficient to ensure that the customs laws of Ukraine are complied with (VRU 2012). Objectives of the application of the RMS include:

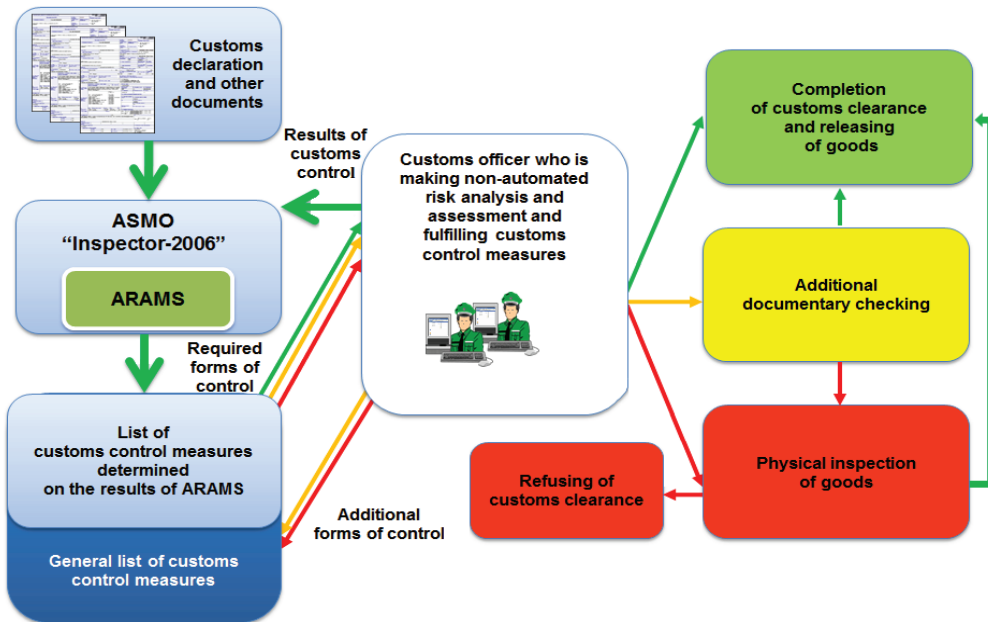
- preventing, predicting and detecting violations of the customs legislation of Ukraine
- ensuring more efficient use of resources available to the revenue and customs authorities by targeting specific groups (the objects of risk analysis) that should be subjected to particular customs controls, thereby enhancing the efficiency of customs controls (risk areas)
- ensuring that actions to protect national security, the life and health of humans, animals, plants, the environment, and consumers' interests are taken within the scope of the revenue and customs authorities' powers
- facilitating the cross-border clearance of goods.

Customs control, based on the application of the RMS, may be automated, manual, or a combination of the two (see Figure 1), with preference given to automated and combined customs control. Combined control includes automated and manual targeting, that is, analysing and estimating risks posed by foreign trade operations and identifying those that should be subjected to additional scrutiny using all sources of

information available to the customs authority. The automated aspects of the RMS are achieved through the use of the Automated Risk Analysis and Management System (ARAMS), which has been integrated into the customs database (ACCS ASMO ‘Inspector’) which, together with several other systems, have been developed by Ukrainian customs specialists, having taken account of the advantages and disadvantages of other countries’ systems.

ARAMS provides automated data comparison within particular transactions, matching them with programmed algorithms (that is, risk profiles). Where potential risks of a breach of customs law are identified, the customs inspector is automatically given the list of customs formalities (forms of customs control) which must be applied in order to further assess the identified risks.

Figure 1: Risk Management System of Ukrainian Customs



Source: Prepared for the IOM in the implementation of PRINEX project funded by the EU.

Upon entering the declaration into the ACCS ASMO ‘Inspector’, automated risk assessment is executed. Analysis by ARAMS is performed in two stages. First, the level of risk hazard is determined within every risk profile (the result of its quantitative estimate). This indicator is determined in different ways in each risk profile depending on its peculiarities. Specifically, the level of risk hazard depends on a combination of indicators and their values.

The risk profile, which is considered to be one of the key instruments of risk management, comprises risk indicators and an algorithm for automated selection of high risk transactions as well as a set of measures for identifying and minimising the corresponding risk (that is, a list of customs formalities). Initially, the profile is prepared as a document, then assessed and approved by the Commission of Experts on RMS application. The risk profile code is then formulated and input into the corresponding ARAMS module of the ACCS ASMO ‘Inspector’. Depending on the practicality of automating risk profiles, some such profiles may be documentary (non-automated control applying the RMS) or electronic (automated) or a combination of both.

Electronic and documentary risk profiles (developed by the Central Office Department) are applied in all Customs Houses unless other means are assigned by the risk profile itself. Documentary risk profiling developed by a particular Customs House is applied within the area of responsibility of that Customs House. Depending on the method used to assign indicator values to risk profiles, regional and central risk profiles are applied. Should indicator values need to be assigned to specific risk profiles, either standard or framework risk profiles may be applied. In this regard, risk profiling involves determining the specific application of particular risk indicators and other risk profile parameters.

In order to enable further examination and/or clarification of the risk area, monitoring of the risk area and, based on the results of such monitoring, taking prompt response measures, hidden risk profiles may be applied which do not involve certain customs formalities (Ministry of Finance of Ukraine [MFU] 2015).

In evaluating risks, there is an opportunity to take into account the track record of foreign economic activity participants, based on positive or negative history indicators of risk profiles:

- negative history indicators quantify violations in a specific period, which are taken into account when determining the level of risk hazard (increase in the level of risk hazard)
- positive history indicators highlight the absence of regulatory violations in a specific period of customs clearances, which are taken into account when determining the level of risk hazard (decrease in the level of risk hazard).

This provides opportunities to adjust the risk evaluation, depending on results of previous system operations. Thus, it is possible to reduce the probability of ineffective ARAMS operations for a particular legal entity, carrier, and so on. However, risk profiling may also be programmed to random sampling, irrespective of positive or negative history.

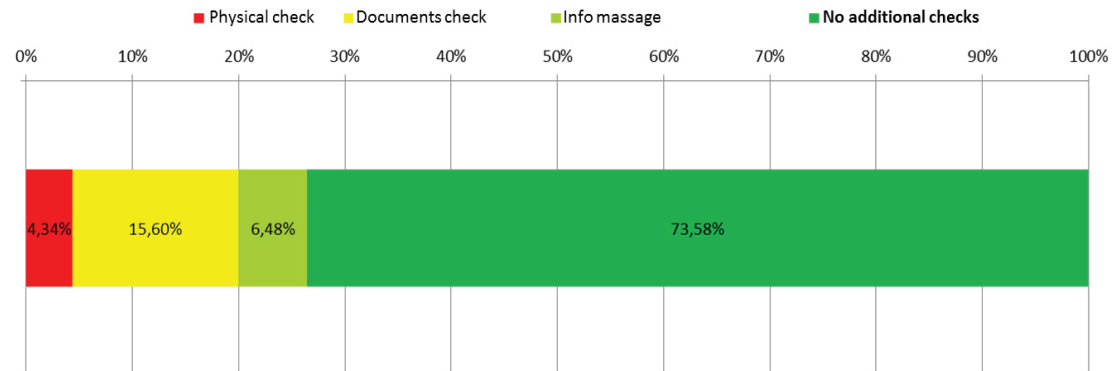
In the second stage of ARAMS analysis, a general list of customs formalities (forms of customs control) is formulated, which contains explanatory notes for the inspector concerning the aim of each type of control and the required scope of such control. Such notes also reference documents that may assist in determining compliance with customs formalities.

The system also provides an opportunity to amend the list of customs formalities depending on specific requirements of a particular customs post, and based on the use of other risk management tools (that is, manually applied risk profiles) such as documentary indicators of risk, operational intelligence, and so on. This approach (using tools of automated, manual and combined control) assists in the formulation of a suite of controls that is adequate for the level and types of assessed risks. The results of customs activities are also recorded, which also assists in analysing the efficiency of ARAMS and making adjustments as required.

Thus 100 per cent of customs declarations undergo primary inspection using ARAMS and only those which present a certain degree of risk are required to be physically inspected (ideally, it is considered that this indicator should not exceed 5 per cent). In 2014, the selection of transactions for physical inspection by ARAMS represented around 4.1 per cent of the total of customs declarations that were selected for physical customs inspection. In most cases (approximately 96 per cent) ACCS ASMO 'Inspector' calls for green and yellow channel processing.

ARAMS is therefore aimed at supporting selectivity of customs control (see Figure 2) and minimising the application of customs formalities in order to achieve a balance between customs control and the facilitation of legitimate trade.

Figure 2: Information on selection of customs declarations for additional checks (calculations include Import, Export and Transit (01.01.2015 – 31.06.2015))



Source: Author’s calculations.

Today, the scope of ARAMS encompasses the key areas of risk (mainly of a fiscal nature) which include elements such as customs value accuracy control, classification, origin of goods, declaration authenticity, non-tariff regulation, etc. As customs authorities at the border are predominantly concerned with security risks, not only are new risk profiles being developed (and current profiles systematically updated) but complete new modules are being developed and integrated into ARAMS, for which the following are currently in operation and/or in the process of planning and development:

- ARAMS module for customs declarations (including electronic customs declarations)
- ARAMS module for automobile Border Control Posts (BCP)
- ARAMS module for automobile and railway BCPs (for commercial cargo)
- ARAMS module for seaports BCPs (in the process of development)
- ARAMS module for airports BCPs (creation is only assumed).

In order to increase the efficiency of customs control and to raise the efficiency and quality of risk profiles, IT solutions are being implemented by specialists from the Department of Risk Analysis together with specialists from the IT Department which are based on the principle of ‘first-hand’ risk profiling. Such solutions (‘Constructor of risk profiles’) will speed up the program implementation of some risk profiles and attract significant customs resources to facilitate the use of ARAMS.

Particular attention is being paid to ‘alerts’, another instrument of risk management. ‘Alerts’ represent the information obtained by a customs authority from the results of its own analytical work (or from other customs authorities) or from other law-enforcement authorities domestically and internationally. This information is of an operational and targetting nature and is used for urgent notification of the customs posts about individuals and/or means of transport which may be involved in violations of law as well as for notification about the goods that are the subject of the violation. ‘Alerts’ also contain information relating to methods of customs control that should be used to expose, prevent and suppress such violations.

Until recently, the use of such notification was only possible in documentary form or, in exceptional cases, by telephone with subsequent documentary confirmation, which lowered the efficiency of operational information dissemination significantly. However, a special module ‘Alerts’ of the ACCS ASMO ‘Inspector’ has been developed and implemented which now automates the process. The system

has two types of alerts: local alerts, intended for use in the area of operations of the customs post that created/submitted the alerts into the database; and global alerts, intended for use by all customs posts regardless of which customs post created/submitted the alert into the database.

4. Conclusions

Ukraine is actively taking steps to take a prominent position in the modern globalised world and to integrate into the global economic community. These processes are complemented by corresponding institutional modernisation including in the area of cross-border trade.

International standards serve as the guiding principles for Ukraine that it needs to aspire to during the processes of reformation, and fulfilment of its international obligations will be the ‘sign posts’ to guide the process and against which the appropriateness and quality of the reforms can be measured.

In turn, the Ukrainian Customs is actively implementing risk management principles of customs control based on international best practices as well as its own solutions, including IT solutions and products. The Ukrainian Customs does not intend to ‘reinvent the wheel’, but does not consider it appropriate to indiscriminately adopt the existing models which have their own shortcomings.

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Note

1 Lower chamber of the Federal Parliament of Ukraine.

Oleg V Komarov



Oleg V Komarov is a Chief Inspector of the Department of Risk Analysis and Counteracting Customs Offences of the State Fiscal Service of Ukraine. He has worked in Ukrainian Customs since 2009, including in the regional customs offices and units of the central apparatus. His main competences are coordination and development of risk management systems and counteracting customs offences. He holds a Master of Public Administration and is a PhD student of the Academy of Customs Service of Ukraine. His main areas of interest include risk management and customs control, customs violations, anti-corruption and governance.