

Turkey



REPUBLIC OF TURKEY
Ministry of Trade



FACILITATING TRADE: Improving Customs Risk Management Systems in the OIC Member States





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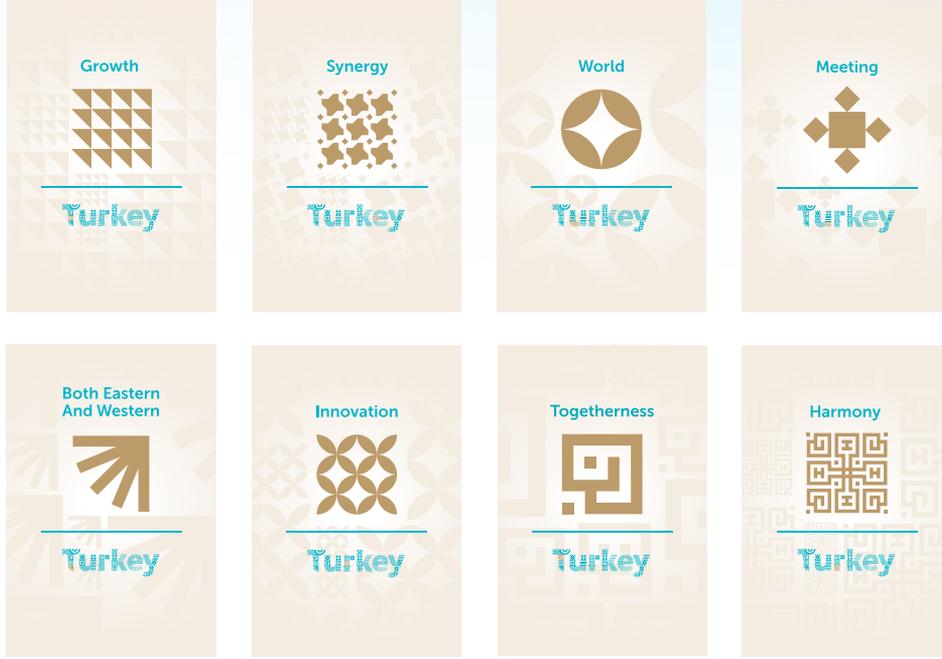
Turkey



Discover the potential

Turkey Discover the Potential logo is made up of 8 key traditional motifs. Each motif represents a different value of rising Turkey.

Here are the motifs and their meanings.



This report has been prepared for the 34th Ministerial Session of the Standing Committee for Economic and Commercial Cooperation of the Organization of the Islamic Cooperation (COMCEC) held on 26-29 November 2018 in İstanbul by Republic of Turkey, Ministry of Trade, DG of Risk Management and Control.

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FOREWORD BY THE MINISTER



Ruhsar PEKCAN / Minister of Trade

Automation in customs procedures together with electronification of risk management mechanisms have been a crucial objective for the Turkish Customs Administration (TCA), particularly for the past two decades.

Hence, TCA replaced the manual processing of customs documents with electronic methods and introduced risk management mechanisms into customs controls, utilizing electronic environment in order to fight against rising fiscal and safety threats.

Major improvements have been achieved in reinforcing customs control capacity of TCA, thanks to introducing fine-tuned and elaborated risk management tools on every stages of customs checks.

While multi-layered and multi-dimensional customs checks are already implemented; on the face of new tax evasion risks and smuggling methods, it has become more critical to manage and analyze the “big data” that custom administrations hold.

Thus, TCA initiated a project in order to make use of most efficient and advanced risk management tools. The Data Mining Project will further strengthen Turkish Customs’ risk management and analysis system by incorporating new technologies.

I sincerely thank all my colleagues for their valuable contributions in preparation of this workbook. I hope that risk management system of Turkish Customs outlined in this booklet will serve as a source of inspiration for the OIC family.



REPUBLIC OF TURKEY
Ministry of Trade

**Directorate General of Risk
Management and Control**



EXECUTIVE SUMMARY

Customs Administrations have been substantially affected by the changes of global trade and increase in foreign economic and commercial relations. In conjunction with the increase in foreign economic and commercial relations, the rise and diversity in the illegal movement of goods, vehicles and human beings have also been observed. For this reason, in order to implement effective control and to administer legislation as a whole and in a systematic way by the customs authorities, performing selective analysis and evaluations is of great importance.

The increase in the legal and illegal transactions has forced the customs authorities and all the administrations facing such transactions to change. Turkish Customs Administration, have demonstrated the necessary efforts to adjust this change; in this context, it has been enabled that 100% of the foreign trade transactions are conducted by means of computerized system. MoT is working within a modern legal framework and EU standards. It is focused on the benefits of service mentality, with effective control mechanisms simplified customs procedures for goods, passengers and vehicles. It serves in accordance with governmental policies, and will encompass, where appropriate new trends and technologies in the world trade environment.

In this regard, MoT evaluates the procedures based on risk analysis with selective methods ensuring that it simplifies legal trade and prevents illicit trade. While it simplifies the procedures for legal and natural persons, who trade legally, it has employed vigorous effective counter measures to combat organized crime.

Within this context, this report has been prepared by the MoT to ensure a consistent level of basic information about how to carry out risk analysis and to give the information to the relevant parties to take advantage in the work, of facilitating legitimate trade whilst remaining an effective deterrent and robust organization against illegal trade and smuggling. Since customs administrations all around the world face huge challenges, as they are the authority in charge of securing complex supply chains while ensuring smooth trade flows, the report also emphasizes cooperation between customs administrations to effectively fulfil their multi-functional tasks.

As a result, this report is composed of eight main chapters. The first and second chapter provides an outlook of the concept of trade facilitation and risk management concept for trade facilitation. Moreover, related concepts and definitions regarding risk management in international documents are also examined in this part. The third and fourth chapter presents risk management concept at Turkish Customs Administration and fundamental tools, software and databases deployed in RM System. The fifth chapter summarises integrated method of evaluating risks hidden in big data. In addition, the results of deploying risk management system and examples of significant seizures are explained in the sixth chapter. The seventh chapter provides the efforts on increasing international cooperation on the subject of risk management. Finally, the last chapter provides conclusions and recommendations for member countries in order to increase the effectiveness of risk management at customs.



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ABBREVIATIONS

AEO	Authorized Economic Operator
BILGE	Computerized Customs Activities
CITES	Convention on International Trade in Endangered Species
COMCEC	The Standing Committee for Economic and Commercial Cooperation of the Organization of the Islamic Cooperation
CRM	Customs Risk Management
DEİK	Foreign Economic Relations Board
DGRMC	Directorate General of Risk Management and Control (RYKGM)
DHS	Department of Homeland Security
EDIFACT	Electronic Data Interchange for Administration, Commerce and Transport
EFTA	European Free Trade Agreement
EU	European Union
GUVAS	Customs Data Warehouse System
GATT	General Agreement on Tariffs and Trade
IPR	Intellectual Property Rights
IRU	International Road and Transport Union
KOSGEB	Small and Medium Sized Industry Development Organization
LDC	Less Developed Country
MoCT	Ministry of Customs and Trade
MoT	Ministry of Trade
MRA	Mutual Recognition Agreement
NCTS	New Computerized Transit System
OECD	Organization for Economic Cooperation and Development
RAD	Risk Analysis Department
RM	Risk Management
RKC	The Revised Kyoto Convention
SAD	Single Administrative Document (Detailed/Full Declaration)
SAFE	Standards to Secure and Facilitate Global Trade
TFA	Trade Facilitation Agreement
TCA	Turkish Customs Administration
TIM	Turkish Exporters Assembly
TIR	Transports Internationaux Routiers
TOBB	The Union of Chambers and Commodity Exchanges of Turkey
TSE	Turkish Standards Institution
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
UNCTAD	The United Nations Conference on Trade and Development
UND	International Transporters' Association
UNECE	The United Nations Economic Commission
UNeDocs	United Nations Electronic Trade Documents
UTIKAD	Association of International Forwarding and Logistics Service Providers
WCO	World Customs Organization
WTO	World Trade Organization
YOİKK	The Portal of the Coordination Council for the Improvement of Investment Environment



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1. THE CONCEPT AND SCOPE OF TRADE FACILITATION

1.1. What Does Trade Facilitation Mean for the World?

In a world that is becoming ever more interconnected, trade remains an important element for the distribution of goods and resources on regional and global level. Through international trade, consumers are given the opportunity to be able to access goods and services that are not available in their own countries. Which in turn gives suppliers access to larger markets and in return increase production levels.

Removing barriers that may hinder or slowdown the flow of goods globally is the main objective of trade facilitation, which aims to simplify, harmonize, standardize, and modernize trade procedures.



To this end various regional and international initiatives have focused on the facilitation of trade on a regional and global level, and World Trade Organization (WTO) is one of the most prominent institutions in that field.

Focus on trade facilitation is an important element within the Doha Trade Round, which was launched at the WTO's Fourth Ministerial Conference in Doha, Qatar, in November 2001. Efforts on trade facilitation within the Doha Round have focused on the General Agreement on Tariffs and Trade (GATT) Articles V, VIII and X, covering Freedom of Transit, Fees and Formalities, and Publication and Administration of Trade Regulations.

Trade Facilitation Agreement (TFA) is another important global initiative for trade facilitation. The TFA, which was launched by WTO members, came into force on February 22th, 2017.

The TFA contains provisions for expediting the movement, release and clearance of goods, including goods in transit. It also sets out measures for effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues. It further contains provisions for technical assistance and capacity building in this area. (WTO, 2018)

Another important global actor dealing in the concept of trade facilitation is the United Nations Economic Commission for Europe (UNECE), which also has a subsidiary, intergovernmental body, United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT).

UN/CEFACT has covered various activities in the field of trade facilitation such as the recommendation for the Single Window concept (UN/CEFACT, 2004). UN/CEFACT also manages various document and electronic messaging standards, including the United Nations Electronic Trade Documents (UNeDocs) and Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT).

The UNECE's activities also include international agricultural quality standards, classification standards for dangerous goods and with the International Road and Transport Union (IRU), it also runs the TIR Convention of 1975. The latter provides a simplified customs transit regime to signatory countries. (Grainger, 2008)

The World Customs Organization is another prominent international actor within the realm of trade facilitation. The Kyoto Convention came into force in 1974, and revised by the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures, which entered into force in 2006, is an important instrument utilized by the WCO to promote the concept of trade facilitation on a global level.

The General Annex of the RKC commits contracting parties to the following key principles:

- Transparency and predictability of customs actions,
- Standardization and simplification of the goods declaration and supporting documents,
- Simplified procedures for authorized persons,
- Maximum use of information technology,
- Minimum necessary customs control to ensure compliance with regulations,
- Use of risk management and audit-based controls,
- Coordinated interventions with other border agencies, and partnership with the trade.

The Revised Kyoto Convention aims at facilitating trade by harmonizing and simplifying customs procedures and practices. To this end, the Convention provides standards and recommended practices for modern customs procedures and techniques. (UNECE, 2018)

While facilitating trade remains a focal point of various international and regional actors, assessment of risks, such as the trade of illicit material and threats related to terrorism, linked to the movement of goods also remains a major concern and priority, leading to various solutions aimed at minimizing such threats while not hindering international trade.

The SAFE Framework of Standards to Secure and Facilitate Global Trade (SAFE Framework) adopted in 2005 is one of the instruments put into force to facilitate trade while minimalizing risks attached to the free movement of goods, and aims to act as a deterrent to international terrorism, secure revenue collections and promote trade facilitation worldwide.



Within this context, The SAFE Framework aims to:

- Establish standards that provide supply chain security and facilitation at a global level to promote certainty and predictability.
- Enable integrated and harmonized supply chain management for all modes of transport.
- Enhance the role, functions and capabilities of Customs to meet the challenges and opportunities of the 21st Century.
- Strengthen co-operation between Customs administrations to improve their capability to detect high-risk consignments.
- Strengthen co-operation between Customs administrations, for example through exchange of information, mutual recognition of controls, mutual recognition of Authorized Economic Operators (AEOs), and mutual administrative assistance.
- Strengthen co-operation between Customs administrations and other Government agencies involved in international trade and security such as through Single Window.
- Strengthen Customs/Business co-operation.
- Promote the seamless movement of goods through secure international trade supply chains.

The SAFE Framework consists of four core elements.

- The harmonization of the advance electronic cargo information requirements on inbound, outbound and transit shipments.
- Commitment to employing a consistent risk management approach to address security threats.
- Requirement that at the reasonable request of the receiving nation, based upon a comparable risk targeting methodology, the sending nation's Customs administration will perform an outbound inspection of high-risk cargo and/or transport conveyances.
- Providing benefits by Customs to businesses that meet minimal supply chain security standards and best practices.

1.2. What Does Trade Facilitation Mean for Turkey?

Turkey, as one of the fastest growing economies in both Europe and G20, places special emphasis on trade facilitation. Turkey wants and strives to further develop its dynamic economy and also, function as a hub in global trade, using its unique geographic location. Both aims amalgamate into one road: facilitating trade.

Turkey is a member of the foundations mentioned before and an active participant of the activities on the trade facilitation area. Turkey ratified the WTO Trade Facilitation Agreement in February 29th, 2016, whereas many of its regulations had already been implemented in the country.

According to OECD's trade facilitation indicators, Turkey's performance improved in recent years. An OECD report states that Turkey performs significantly better than many OECD countries in some fields like streamlining of procedures, governance and impartiality and involvement of the trade community; while its performance in some fields are below the OECD average like border agency cooperation, automation, information availability. (OECD, 2014) After these indicators published in 2014, Turkey has increased its capacity in many fields as mentioned in summary below.

1.2.1. Modernization of Border Crossing Points

Turkey has modernized a number of its border crossing points as a new prospect in the UNESCAP region in order to strengthen its infrastructure capacity, which helps facilitating trade. Projects in many border-crossing points have been completed, such as Kapıkule Border Gate to Bulgaria, Ipsala Border Gate to Greece, Habur Border Gate to Iraq and Cilvegözü Border Gate to Syria. These reconstruction activities have enabled a suitable architecture, making customs formalities easier, facilitated technological innovations, and a contemporary environment for the parties.



Figure 1: Kapıkule and Habur Border Gates, Before and After Modernization.

1.2.2. Authorized Economic Operator Program

As mentioned before, Authorized Economic Operator Program is one of the core elements in the SAFE Framework and it has been adopted by various WCO member states, one of them being Turkey.

The AEO Program of Turkey entered into force on January 10th, 2013 with the publication of the Implementing Procedures for the Facilitation of Trade in the Official Journal of The Republic of Turkey.

The program's aim, in line with the the WTO TFA, The General Annex of the RKC, and WCO SAFE Framework of Standards, is to facilitate the foreign trade operations of its traders by minimizing the required lead times and costs. The program also, in line with the WCO SAFE Framework of Standards, aims at enhancing security by encouraging best practice at all levels in the international supply chain.

Companies wishing to gain this status are also required to have acquired present and up-to-date ISO 9001 and ISO 27001 certificates.

As of October 2018, 374 companies have the AEO Certificate and more than 80 companies' applications are being processed. In 2017, these 374 companies carry out 35,19% of all imports and 30,94% of all exports in Turkey.

Companies, which request certification, will have to apply with the required documents to the Regional Customs and Trade Directorates they operate with. After the application, the regional directorate will examine the submitted documents and decide whether they are appropriate.

If the documents are found appropriate, the regional directorate will send them to the Ministry of Trade (HQ), where the self-assessment questionnaire will be examined. The headquarters can ask for clarifications at this point. If the answers are complete, the audit process can begin.

The designated auditors will visit the premises of the company and perform due to see if the company meets the necessary documentation and implementation as well as necessary safety and security criteria. The auditors will write a report about their findings and send it to the headquarters.

At the headquarters, the audit report and submitted documents will be reviewed and certificates will be given to the companies that are found eligible.

The certificate's validity is indefinite as long as the criteria are continued to be met. There will be periodic checks by the Ministry to see if the companies still hold the criteria.

The certificates will be suspended or revoked according to their offences if companies do not comply with the rules set.

AEO



TÜRKİYE

The AEO status is granted to companies that	Are reliable
	Have adequate traceable documentation
	Have financial solvency
	Practice necessary safety and security measures
	Are established in Turkey
	Are in operation for at least three years

Companies applying for the AEO status are required to fill out a questionnaire contains around 100 questions on topics such as	How records are kept
	Internal control procedures
	Customs compliance
	Safety and security of premises and cargo units
	Safety and security of goods
	Supply chain security
	Personnel security

The certificate holders will have privileges such as	The rights of local clearance, authorized consignor status, and authorized consignee status
	The use of lump-sum guarantees or partial guarantees
	Issuing A.TR movement certificates and EUR.MED invoice declarations on their own
	Submitting incomplete declaration and documents
	Summary declaration with reduced data
	Green-line facilitations
	Fewer documentary and physical controls, control priorities

Aside from the rights that provide companies with reduced lead times and costs, the AEO status, provide companies with a great opportunity and privileges for recognition among international parties, leading to a marketing advantage in the competitive international trade world.

The greatest benefit arises when Mutual Recognition Agreements (MRA) are signed with other countries. MRAs provide AEO certificates to be recognized between parties and deliver the facilitations to the recognized AEO certificates of the cosigned country.

Turkey has signed an MRA with South Korea on June 9th, 2014, starting with the participation of three companies from two countries and is negotiating with other countries.

The AEO program of Turkey started a new era in customs procedures and it is expected to facilitate the trade of Turkey greatly with its trading partners. The AEO program is a major step to reach our vision of being the country where trade is the easiest and the safest.

1.2.3. The Single Window System

The single window system can be described as a facility, which allows parties involved in trade and transport to lodge standardised information and documents with a single entry point to fulfill all import, export and transit-related regulatory requirements.



In the WTO Trade Facilitation Agreement Article 10.4., it is stated that “Members shall endeavour to establish or maintain a single window, enabling traders to submit documentation and/or data requirements for importation, exportation, or transit of goods through a single entry point to the participating authorities or agencies.”

Turkish Single Window System was implemented in two phases: E-document and E-application. E-document step provides transferring of permission, approval and documents in the electronic environment, using, and following these directly without delivering hard copies of these. E-document phase of the System carried into practice on January 14th, 2014.

E-application step provides informing the related institution by making permission, approval and documents related applications to our Ministry directly and getting the application result in the electronic environment. E-application phase of the System carried into practice on April 19th, 2016.



Efficient use of sources, increasing efficiency of controls, simplifying procedures and customs transactions, saving costs and time, providing transparent customs transactions and paperless environment are the aims of the System.

Permissions, documents and approvals that are prepared by institutions and used in customs operations are executed and controlled electronically by the Single Window System. Operator applies to the related institution for permissions, documents and approvals through the Single Window System. After confirming of approvals by related Institutions, the System constitutes ID number for using in customs declarations and ID number of the document is entered in the declaration form's 44th box by the operator. By entering the ID number, system controls the validity of the ID number as well as the other information in the declaration form such as firms tax ID, HS code, quantity etc.

Benefits of the Single Window System For Turkish Government	Correct revenue yields
	Efficient deployment of resources
	Improved Trader Compliance
	Sophisticated 'risk management' techniques
Benefits of the Single Window System For Traders	Cutting costs
	Faster clearance
	Predictable application of rules
	More effective deployment of resources

As of October 2018, 124 documents from 17 different institutions' application and approval processes can be carried out within the System.

Institutions Within the Turkish Single Window System	
Ministry of Trade	Ministry of Health
Ministry of Agriculture and Forestry	Ministry of Environment and Urbanization
Ministry of Transportation and Infrastructure	Ministry of Internal Affairs (General Directorate of Security)
Ministry of Industry and Technology	Ministry of Treasury and Finance
Ministry of Culture and Tourism	Ministry of Energy and Natural Resources
Ministry of Family, Labour and Social Services	Borsa Istanbul
Energy Market Regulatory Authority	Turkish Atomic Energy Authority
Capital Markets Board of Turkey	Turkish Standards Institution
Eti Mine Operations General Directorate	

Table 1: Institutions within the Turkish Single Window System

1.2.4. Board of Trade Facilitation

Article 23.2 of the WTO Trade Facilitation Agreement states “Each Member shall establish and/or maintain a national committee on trade facilitation or designate an existing mechanism to facilitate both domestic coordination and implementation of the provisions of this Agreement.”

In accordance with this article, The Board of Trade Facilitation was established by the Prime Ministry Circular No. 2016/27, which was published on December 3rd, 2016 at the Official Journal of Turkish Republic.

The Board was tasked with improving the cooperation and coordination between agencies and establishing trade facilitation strategies and action plans. In accordance with its task about agency coordination, the Board members are composed of actors from both public and private sectors.

Members of the Board of Trade Facilitation	
Ministry of Trade (Chair)	
PUBLIC	PRIVATE
Ministry of Transportation and Infrastructure	The Union of Chambers and Commodity Exchanges of Turkey (TOBB)
Ministry of Foreign Affairs	Turkish Standards Institution (TSE)
Ministry of Industry and Technology	Foreign Economic Relations Board (DEİK)
Ministry of Environment and Urbanization	Small and Medium Sized Industry Development Organization (KOSGEB)
Ministry of Agriculture and Forestry	Turkish Exporters Assembly (TİM)
Ministry of Health	The Banks Association of Turkey
	Associations of Customs Consultancy
	Association of International Forwarding and Logistics Service Providers (UTİKAD)
	International Transporters' Association (UND)

Table 2: Members of the Board of Trade Facilitation

The Board has some activities within the The Portal of the Coordination Council for the Improvement of Investment Environment in Turkey (YOİKK). The Strategy for Trade Facilitation of Turkey and The Five Year Action Plan entered into force in 2018. The website of the Board was accordingly put into service.

With the Strategy Document, these five main axis are defined:

- Transparency in customs and trade procedures
- Facilitation of procedures
- Reducing the commercial costs
- Improving cooperation
- Improving capacity.

The actions within this axis were separated into three categories: short term (1 year), medium term (3 years) and long term (5 years).

By achieving targets abovementioned, the Board's goal is to thrive to improve Turkey's rankings in the international reports and indexes.

2. CUSTOMS RISK MANAGEMENT (CRM) SYSTEM FOR TRADE FACILITATION

International trade is essential and a must for economic development. It is the key to the prosperity of nations. Being aware of this fact, trade facilitation takes an important place in every government's agenda.

Decreasing international trade costs owing to the efforts for trade facilitation, alongside with the remarkable developments in transportation and communication possibilities, have led to the exponential growth in international trade volume. However, it is observed that the increase in legal trade operations is accompanied with the increase in illegal transactions.

At this point where the international trade has emerged, naturally, the workloads of customs administrations have increased as well. Nowadays customs administrations are dealing with such high number of exports, imports and transits that cannot be compared to the transactions of a few decades ago. Nevertheless, the resources of the customs administrations are not increasing in accordance with the workloads.

With the current resources and the number of employees, it is not possible to control every transaction thoroughly. In the meantime, even if we assume that customs administrations would have enough resources, still it would not be economically logical to control every transaction, since control means time and time is money for traders. Given the large number of transactions, customs administrations face the dilemma of facilitating trade to support traders, while detecting non-compliance in order to protect public revenue and public safety and security.

While trade facilitation comes to the fore, supply chain security also becomes an important issue. Over many years, international trade and transport networks and infrastructures have been identified as potential targets for international terrorism and cross-border crime. While customs have always been in charge of controlling international trade in terms of prohibitions and restrictions, the aspect of securing the international trade supply chain has put growing and additional burdens on customs to manage this balance.

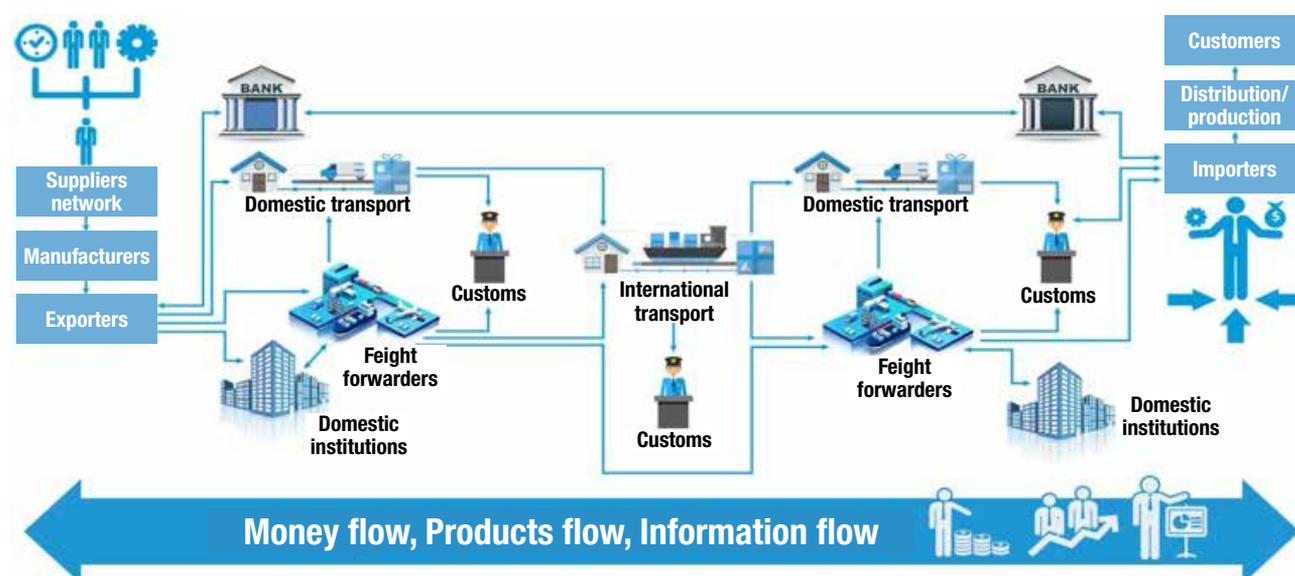


Figure 2: Global supply chain and the role of Customs Administrations. (COMCEC, 2018)

“The United Nations Conference on Trade and Development (UNCTAD) estimates that the average customs transaction involves 20-30 different parties, 40 documents, 200 data elements (30 of which are repeated at least 30 times) and the re-keying of 60-70% of all data at least once. With the lowering of tariffs across the globe, the cost of complying with customs formalities has been reported to exceed in many instances the cost of duties to be paid. In the modern business environment of just-in-time production and delivery, traders need a fast and predictable release of goods (COMCEC, 2018).

To deal with the dilemma of facilitating the trade and controlling at the same time, modern customs administrations are using two main tools: *Risk Management and Post Clearance Audits*. Despite the limited resources and time constraints, customs administrations, with the help of these tools, can conserve and even improve control effectivity while reducing controls.

Trade facilitation ideas, such as risk management and the preferential treatment of trusted operators with a good compliance history, can significantly free resources. These can then be redeployed to target the clandestine cross-border activities (Grainger, 2011). In this regard, Risk Management is one of the most important study areas of customs administrations all over the world.

Traditional Approach vs Selectivity Approach

The traditional approach to processing cargo can be characterized by the following:

- Because there are not enough resources to examine every shipment thoroughly, examinations are generally cursory and unreliable.
- Even when the examination results in the discovery of a discrepancy, the results are not properly reported or recorded.
- There is little or no analysis of the results of examinations or of past violations, so patterns are not always recognized or dealt with effectively.
- There is a false sense of comfort based on the belief that all shipments are examined and few discrepancies are discovered.
- All traders are considered potential violators and there is little effective communication with them.
- Multiple checks require multiple stops in the examination process and the intervention of an unnecessarily large number of officers.
- The more opportunities for individual officers to delay the process or otherwise intervene, the more likely the expectation and possibility of a gratuity in order to expedite the processing or overlook technicalities.

The Cargo selectivity system can overcome each of these deficiencies. Although fewer examinations are conducted, they are conducted in a thorough manner designed to increase the discovery of instances of non-compliance. Voluntary compliance is encouraged and rewarded. Targeting and simplified procedures reduce the level of discretion of individual officers and the opportunities for gratuities. Unnecessary delays are eliminated and transportation costs are reduced (USAID, 2004).



2.1. The Overview of Risk Management at Customs

The World Customs Organization (WCO) defines “**Risk Management**” in Glossary of International Customs Terms as “Coordinated activities by administrations to direct and control risk” In addition “**Risk Analysis**” is defined as “The systematic use of available information to determine how often defined risks may occur and the magnitude of their likely consequences.” (WCO, 2018a)

US DHS Lexicon defines “**risk**” as the potential for an unwanted outcome resulting from an incident, event, or occurrence, as determined by its likelihood and the associated consequences. It also defines “**risk analysis**” as the systematic examination of the components and characteristics of risk. On the other hand, “**risk management**” is defined as a process of identifying, analyzing, assessing, and communicating risk and accepting, avoiding, transferring or controlling it to an acceptable level considering associated costs and benefits of any actions taken (US DHS, 2010).

Risk management is a logical and systematic method of identifying, analyzing and managing risks. Risk management can be associated with any activity, function or process within the organization and will enable the organization to take advantage of opportunities and minimize potential losses.

Risk management is successfully applied in the private sector, where insurance, banking, trade and industry find that it creates opportunities to improve business results (WCO, 2003).

As risk-based management concept is applicable in almost every business and governmental area, there is a lot of experience that could be shared with customs issue. From customs point of view, risks include the potentials for non-compliance with customs law such as licensing requirements, valuation provisions, rules of origin, duty exemptions regimes, trade restrictions, and security regulations, as well as the potential failure to facilitate international trade.

Risk management is at the heart of border management efficiency and effectiveness and is the key to achieving the ‘balanced approach’ (Widdowson, 2012). Sound risk management is fundamental to effective customs operations, and it would be true to say that all administrations apply some form of risk management, either formal or informal (De vulf, Sokol, 2004).

Risk management as systematic identification and implementation of all measures necessary to limit exposure to customs risk, determines which persons, goods, and means of transport should be examined and to what extent. The high-risk persons, goods and means of transport are subject of high-level controls and interventions; despite of low-risk ones that receive high-level trade facilitation. The risk management process helps customs administrations to focus on priorities and decisions on deploying limited resources to deal with the areas of highest risks.

In general, terms, risk in customs can be defined as the potential for non-compliance with national laws and regulations. In this context, there are safety and security risks that threaten public health and security and there are fiscal risks that can result in loss of revenues. Customs administrations are also responsible for the implementation of non-tariff common commercial policy measures, and any other legislation that is related with customs operations.

In Table 3 some of the risk topics and their relevance with the objectives of customs administrations are shown.

	Revenue Collection	Public Health	Environmental Protection	Fight Against Terrorism	Fair Competition
Non-declared goods	✓	✓	✓		✓
Proper Tariff Classification	✓	✓	✓		✓
Proper Valuation	✓				✓
Proper Country of Origin	✓				✓
Trade Policy Measures		✓	✓	✓	
Proper Customs Procedures	✓	✓	✓		
Intellectual Property Rights (IPR)		✓			✓
Trade Agreements Compliance	✓				✓
Money Laundering				✓	
Environmental Crime		✓	✓		
Smuggling					
Drugs and Precursors		✓			
Weapons of Mass Destruction		✓	✓	✓	
Firearms		✓		✓	
CITES			✓		
Nuclear and Radioactive Materials		✓		✓	
High Customs Duty Goods	✓	✓	✓		

Table 3: Origin of Risks for Different Customs Objectives. (COMCEC, 2018)

Risk management within customs can be strategic, operational or tactical. It should be remembered that the risk management process can apply across all of these levels.

Strategic risk management - By studying comprehensive information, customs administrations can identify areas of risk, sift out those of minor importance, and intervene only where experienced and practical judgement indicates it is necessary. Risk areas in the customs context can include social issues (exclusion of drugs, pornography etc.), import/export prohibitions and restrictions (e.g. CITES), public health, environment, commercial policy measures (e.g. IPR, GSP), quotas, and duty and tax issues.

Operational risk management - is the determination of the level of control necessary to deal effectively with the assessed risk. An example of this is determining the audit controls applied to an importer or how to deploy limited staff and equipment effectively. Using this approach, the customs moves from being a “gatekeeper” checking every movement, to checking only selected movements which demonstrate the greatest risk.

Tactical risk management - is used by officers at their workplace in dealing with immediate situations. Using set procedures combined with intelligence, experience and skill, they decide which movements require greater controls (WCO, 2003).

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

The risk management process consists of several steps that are shown in Figure 3. As seen in the diagram risk management is a continuous, cyclic, dynamic process not a static one and it is updated and improved gradually.

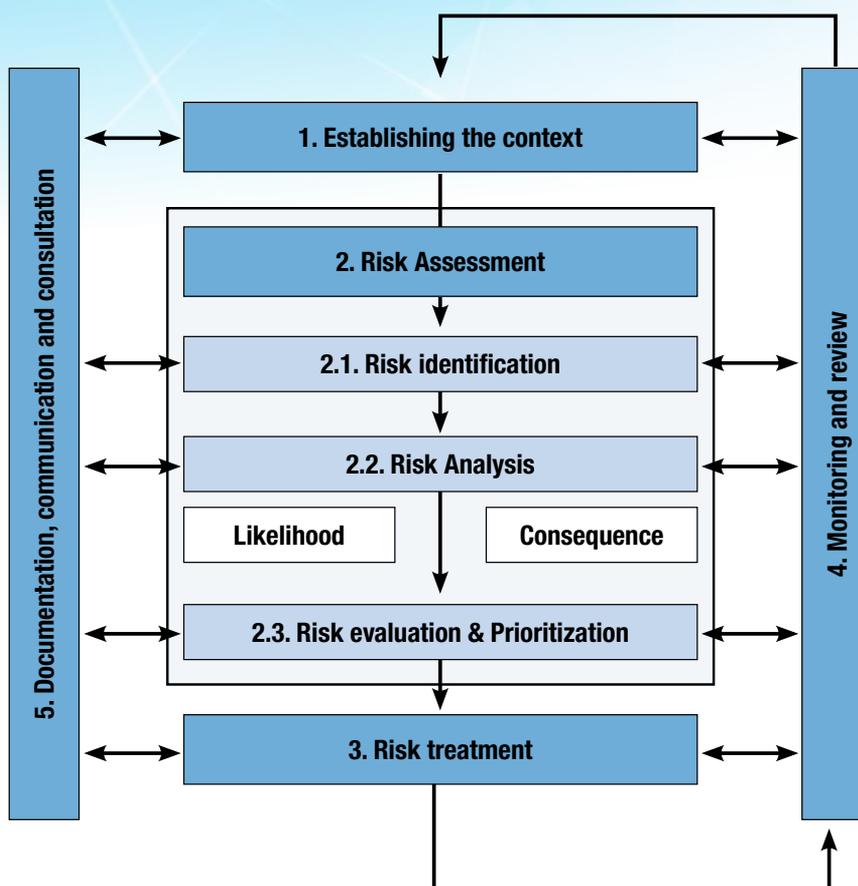


Figure 3: Risk Management Process (WCO, 2011)

Risk management process begins with establishing the context. This stage defines the context in which risk management will take place, and aims at clearly articulating and clarifying the objectives and what risks are being examined. In the risk identification phase all potential risk are identified and recorded by using a systematic process to identify what risks could arise, why and how, thus forming the basis for further analysis. The risk analysis process, which is principally about quantifying risk, and requires consideration of the sources of identified risks, an assessment of their potential. The analyzed risks are compared and prioritized. Then the risks are treated, which means decisions or actions are taken in response to the identified risks. Monitoring and review is done in every step of the risk management process.

Risks are identified and then analyzed in terms of likelihood of the occurrence of the relevant risk and the expected consequences. The level of risk is determined as high, medium or low according to the following chart.

Likelihood	Consequences				
	Extreme	Big	Medium	Small	Insignificant
Almost certainly	high	high	high	middle	middle
Likely	high	high	middle	middle	low
Middle	high	middle	middle	low	low
Small	middle	middle	low	low	low
Rare	middle	middle	low	low	low

Table 4: Likelihood/Consequences, WCO (2003)

The implemented and developed risk management system and the successful application of selectivity method are closely interdependent and highly interconnected processes. One of the most applied selectivity techniques is the establishment of Customs control channels:

- **Green channel:** no control (immediate release without examination),
- **Yellow channel:** documentary control,
- **Red channel:** documentary and physical control,
- **Blue channel:** control at a later stage (post-clearance audit).

According to the previously established risk indicators and risk profiles, goods, vehicles and persons are routed to one of the channels. Automatically, the IT system determines whether they will be declared on green, red, yellow or blue channel. Customs officer will reroute customs declaration within pre-established channel, if he/she has a reasonable doubt that the goods, vehicles and persons must be examined (Biljan, Trajkov, 2012).

2.2. Risk Management in International Documents

Risk management is overemphasized in international agreements and documents as it is essential for modern customs administrations and it is a tool that contributes to the welfare, facilitating the trade.

2.2.1. Trade Facilitation Agreement and Committee on Trade Facilitation

Bureaucratic delays and “red tape” pose a burden for moving goods across borders for traders. Trade facilitation—the simplification, modernization and harmonization of export and import processes—has therefore emerged as an important issue for the world trading system.

Trade facilitation efforts can slash the costs and time needed to export and import goods. This is critical as trade costs can be equivalent to a 134% ad valorem tariff on a product in high-income countries and a 219% tariff equivalent in developing countries according to a study by WTO economists in 2015.

World Trade Organization (WTO) members concluded negotiations at the 2013 Bali Ministerial Conference on the landmark Trade Facilitation Agreement (TFA), which entered into force on 22 February 2017 following its ratification by two-thirds of the WTO membership. The TFA contains provisions for expediting the movement, release and clearance of goods, including goods in transit. It also sets out measures for effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues. It further contains provisions for technical assistance and capacity building in this area.

The Trade Facilitation Agreement (TFA) sets forth a series of measures for expeditiously moving goods across borders inspired by the best practices from around the world. Risk management is one of the key measures contained in TFA that allows reducing the time required for clearance while improving controls.

Section I contains provisions for expediting the movement, release and clearance of goods, including goods in transit. It clarifies and improves the relevant articles (V, VIII and X) of the General Agreement on Tariffs and Trade (GATT) 1994. It also sets out provisions for customs cooperation. **Section II** contains special and differential treatment (SDT) provisions that allow developing and LDC Members to determine when they will implement individual provisions of the Agreement and to identify provisions that they will only be able to implement upon the receipt of technical assistance and support for capacity building. **Section III** contains provisions that establish a permanent committee on trade facilitation at the WTO, require members to have a national committee to facilitate domestic coordination and implementation of the provisions of the Agreement.



Trade Facilitation Committee is established pursuant to Article 23.1 of Trade Facilitation Agreement. This committee is open for members' participation and keeps contact with other international organizations in the field of trade facilitation. According to the Article 23.2, WTO Members are bound to have a national committee on trade facilitation too.

Pursuant to Article 7.4, WTO Members are bound to set up or maintain a risk management system. Nonetheless, this obligation is neutralized by adding the term "to the extent possible". In light of this wording, WTO Members are compelled to set the broadest scope and the greatest content for risk management systems as far as their national resources allow.

WTO AGREEMENT ON TRADE FACILITATION

ARTICLE 7: Release and Clearance of Goods

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4 Risk Management

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 a disguised restriction 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. A Member also may select, on a random basis, consignments for such controls as part of its risk management.

4.4 Each Member shall base risk management on an assessment of risk through appropriate selectivity criteria. Such selectivity criteria may include, inter alia, the Harmonized System 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.

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2.2.2. World Customs Organization (WCO) Revised Kyoto Convention

WCO, established in 1952, is an independent intergovernmental organization competent in customs matters whose mission is to enhance the effectiveness and efficiency of customs administrations.

The WCO Council adopted the Protocol of Amendment to the International Convention on the simplification and harmonization of Customs procedures (revised Kyoto Convention) in June 1999. In its revised form the Kyoto Convention is widely regarded as the blueprint for modern and efficient customs procedures in the 21st century. Once implemented widely, it will provide international commerce with the predictability and efficiency that modern trade requires. It is also called as a quality standard for a modern well-functioning customs administration.

The Revised Kyoto Convention (RKC) is an international agreement that provides a set of comprehensive customs procedures to facilitate legitimate international trade while effecting customs controls including the protection of customs revenue and society. It deals with key principles of simplified and harmonized customs

procedures, such as predictability, transparency, due process, maximum use of information technology, and modern customs techniques (e.g. risk management, pre-arrival information, and post-clearance audit). (Yasui, 2010)

The broad legal basis for application of risk management by customs is provided for in the Standards of Chapter 6 of the General Annex of the revised Kyoto Convention. This Guide makes references to the revised Kyoto Convention texts where appropriate (WCO, 2003).

REVISED KYOTO CONVENTION

General Annex / Chapter 6

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6.3. Standard

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

6.4. Standard

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

6.5. Standard

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

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2.2.3. WCO SAFE Framework of Standards

In June 2005, the WCO Council adopted the SAFE Framework of Standards to Secure and Facilitate Global Trade (SAFE Framework) that would act as a deterrent to international terrorism, secure revenue collections and promote trade facilitation worldwide.

SAFE Framework is a unique instrument ushered in modern supply chain security standards, heralding the beginning of a new approach to the end-to-end management of goods moving across borders while recognizing the significance of a closer partnership between Customs and businesses.

WCO updates SAFE Framework every three years to ensure that it remains relevant and reflects new opportunities, challenges and associated solutions and the last published edition is the 2018 edition.

The SAFE Framework consists of four core elements. First, it harmonizes the advance electronic cargo information requirements on inbound, outbound and transit shipments. Second, each country that joins the SAFE Framework commits to employing a consistent risk management approach to address security threats. Third, it requires that at the reasonable request of the receiving nation, based upon a comparable risk targeting methodology, the sending nation's customs administration will perform an outbound inspection of high-risk cargo and/or transport conveyances, preferably using non-intrusive detection equipment such as large-scale X-ray machines and radiation detectors. Fourth, the SAFE Framework suggests benefits that customs will provide to businesses that meet minimal supply chain security standards and best practices.



The SAFE Framework, based on the previously described four core elements, rests on the three pillars of Customs-to-Customs network arrangements, Customs-to-Business partnerships and Customs-to-other Government Agencies co-operation. (WCO, 2018b)

Pillar 1 (Customs to Customs) of SAFE Framework includes standards that are directly linked with risk management in customs.

WCO SAFE FRAMEWORK OF STANDARDS

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2.4 Standard 4 – Risk-Management Systems

The Customs administration should establish a risk-management system to identify potentially high-risk cargo and/or transport conveyances and automate that system. This management system should include a mechanism for validating threat assessments and targeting decisions and implementing best practices.

2.5 Standard 5 - Selectivity, profiling and targeting

Customs should use sophisticated methods to identify and target potentially high-risk cargo, including - but not limited to - advance electronic information about cargo shipments to and from a country before they depart or arrive; strategic intelligence; automated trade data; anomaly analysis; and the relative security of a trader's supply chain. For example, the Customs-Business Pillar certification and validation of point-of-origin security reduces the risk, and, therefore, the targeting score.

2.7 Standard 7 – Targeting and Communication

Customs administrations should provide for joint targeting and screening, the use of standardized sets of targeting criteria, and compatible communication and/or information exchange mechanisms; these elements will assist in the future development of a system of mutual recognition of controls.

2.8 Standard 8 – Performance Measures

The Customs administration should maintain statistical reports that contain performance measures including, but not limited to, the number of shipments reviewed, the subset of high-risk shipments, examinations of high-risk shipments conducted, examinations of high-risk shipments by Non-intrusive inspection technology, examinations of high-risk shipments by Non-intrusive inspection and physical means, examinations of high-risk shipments by physical means only, Customs clearance times and positive and negative results. Those reports should be consolidated by the WCO.

2.2.4. WCO Risk Management Compendium

Risk management has been one of the key vehicles for customs administrations to better meet the demands of the 21st century operating environment, which is seeing customs administrations endeavoring to address risk wherever they are found and increasingly as early in the supply chain as possible.

There is an increasing need to define a common approach that enables customs administrations across the globe to speak the same language about the methodology they utilize to both identify and treat potential risks. This methodology is outlined in the WCO Risk Management Compendium, which in itself is sufficiently flexible in its application to meet the unique operating environment and conditions of individual WCO Members.

This Compendium provides a common reference document for the concepts associated with risk management in customs, and assists Members in their efforts to develop and implement an all-encompassing administration-wide approach to risk management. The Compendium builds on the wide range of risk management related customs instruments and tools, and updates and consolidates the work by the WCO, enabling the international customs community to speak as one in relation to the methodology it uses when managing risk.

The Compendium has five purposes. First, it defines some of the key terminology associated with risk management. Second, it outlines the customs context for managing risk. Third, it presents the key components of a holistic organizational risk management approach including a systematic methodology for managing risk. Fourth, it sets out various techniques and tools for managing risk in practice. Fifth, it presents Members' experiences in risk management in the form of case studies.

The Compendium is comprised of two separate but interlinked volumes. Volume 1 deals with organizational aspects of risk management. It describes the different building blocks of an organizational risk management framework. Embedding risk management as an organizational culture and building risk management capacity in gradual steps are also included in Volume 1.

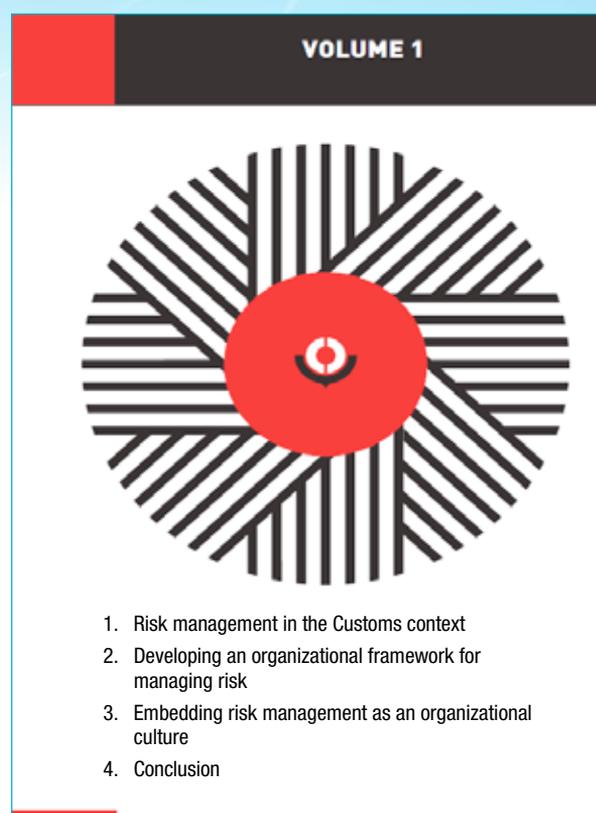
Volume 2 deals with operational risk management. It includes “enforcement sensitive” material for “Customs only” purposes, including numerous practical guides and templates for assessing risks in relation to the movement of goods, people, conveyances, economic operators and other parties to international trade. The topics covered in Volume 2 can be categorized into four broad clusters:

- risk assessment, profiling and targeting;
- risk indicators;
- analysis; and
- Information and intelligence.

Risk indicators are also categorized into different modes of transport such as maritime cargo, air cargo and land cargo.

Volume 2 of the WCO Customs Risk Management Compendium includes several documents (e.g. General High-Risk Indicators, risk indicators and manuals based on international trade logistical phases as pre-arrival, arrival and post-arrival) which are useful references for risk management (and assessment)(WCO, 2018b).

The Compendium is a living document and will be continually updated to reflect the latest developments regarding risk management practices in today's constantly changing customs operating environment.





3. RISK MANAGEMENT (RM) AT TURKISH CUSTOMS ADMINISTRATION (TCA)

Risk management and analysis have been implemented in the Turkish Customs Administration since the year of 1998 when the customs declarations were first submitted electronically. Risk profiles targeting risky shipments or declarations are set by Department of Risk Analysis, which is overseen by the DG of Risk Management, and Control based in Ankara. In this chapter, legal basis of risk management, the historical background and organizational structure of it will be discussed as well as the functions and tasks of RM in declaration modules.

3.1. Legal Framework of RM System

The TCA has statutory instruments governing risk management system at customs. To begin with, the definitions of “Risk” and “Risk Management” are described in the articles 3/24 and 3/25 of Customs Law Nr. 4458. According to these provisions, “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 Turkey and other countries and the presence of goods that are not in free circulation, which a) prevents the correct application of international or national measures, or b) compromises the financial interests of the State, or c) poses a threat to the State’s security and safety, to public health, to the environment or to consumers.

“Risk management” means the systematic identification of risk and implementation of all measures necessary for limiting exposure to risk. This includes activities such as collecting data and information, analysing and assessing risk, prescribing and taking action and regular monitoring and review of the process and its outcomes, based on international and national sources and strategies.

Paragraph 2 of the article 10/A ‘is as follows: “2. Customs controls, other than spot-checks, shall be based on risk analysis using automated data processing techniques, with the purpose of identifying and quantifying the risks and developing the necessary measures to assess the risks, on the basis of criteria developed at national and, where available, international level”.

Paragraph 3 of the article 10/A gives authority to the Ministry of Trade (MoT) to form a risk management framework, and establish criteria and priority control areas. For that purpose, it can collect store and process data on customs formalities, customs offences and smuggling acts with a view to determining the risk criteria. According to the article 35/b of Customs Law, summary declarations shall contain the sufficient details in order to carry out risk analysis for safety and security.

The Customs Regulation in article 69 it is explained that the Customs Office shall make a Risk Analysis for safety and security based on the information from Summary Declaration before the arrival of goods.

According to the article 67, it is mandatory for operators to submit to TCA the advance cargo information related to import and transit consignments. This allows the TCA to conduct risk analysis for safety and security on summary declarations before the arrival of goods.

In the article 182, it is declared that the results of customs clearance and controls against which risks are detected after a central and local risk analysis is registered into the secure electronic system.

In the article 183 of Customs Regulation it formally describes how to examine and make the clearance and controls by the customs declarations against which risks are detected after a local risk analysis is made by local customs offices.

Besides that, the TCA has introduced the Authorized Economic Operator concept on the customs legislation having a positive effect on risk analysis efforts. Thus, companies without an AEO Certificate could be subject to more detailed checks while AEOs can benefit from simplified procedures and faster transactions times. The post-clearance audits of AEOs are also carried out on a risk analysis basis.

The last but not the least, TCA under the hierarchy of MoT carries out risk management-related tasks and exercises of power according to the authorization given by the article 447/c-ç of the Executive Order of Presidency Nr.1.

In the above-mentioned framework, all legislations of the MoT in the field of Risk analysis is identical and consistent with the legislation of the European Union. There is not any lack of legislation in terms of Risk Analysis. MoT is to continually review its statutes to ensure conformity and identify any changes within the EU legislative framework.

As a result, legal environment mentioned above is adequate towards risk detection, prevention of non-compliance, trade facilitation, safety, security and environmental protection based on risk management. Besides that, it does not set any barriers to the use of modern risk analysis techniques such as data mining, text mining or social network analysis.

3.2. The Historical Background of RM System

As stated before, risk management studies and tasks get started with the first submission of the electronic customs declaration in the year of 1998. The data gathered from electronic system called BILGE (Computerized Customs Activities) was needed to address through the view of risk management methodology. As a result of this need, a division of risk analysis was established under the DG of Customs. This division was the core to risk-oriented customs control studies. Its fundamental responsibility was to evaluate import and export declaration data and to treat the detected risks after the evaluation.

After that, each General Directorate of TCA established its own risk division aligned with the tasks they were responsible. For instance, DG of Customs Enforcement structured this division to detect illegal goods by using risk analysis techniques. Another risk division under the DG of Customs Control focused primarily on the post-clearance control of the declarations. In other words, duties related to risk analysis had been conducted under various divisions in each General Directorate for a period of certain time.





In 2008, all these divisions of risk analysis were united under Risk Management and Strategic Assessment Unit becoming the only administrative body responsible for overall risk management process of TCA. It was a milestone due to the constitution of a wholly integrated system. Afterwards, risk analysis expanded to other declaration modules such as Summary Declarations for safety and security risks, NCTS and TIR/Transit Declarations for transit risks, Express Cargo Declarations for safety and security and financial risks etc. With these new fields of tasks, human resources were increased. One of the important achievements in this period was the EU-Turkey Twinning Project on the subject of strengthening the administrative and operational capacity of risk management system. It was realized under the Project of Modernization of Turkish Customs Administration VI. Germany and England were the twinning partners on the EU side.

In the context of the project, study visits on risk analysis were carried out in Germany and United Kingdom. In addition, internships was organized for the personnel of Risk Management and Strategic Assessment Unit at the premises of the twinning partners; valued experiences were shared. Training programs on risk analysis were organized for the staff of the Unit and operational staff from regional customs offices. Other activities were held to improve the risk analysis criteria on both financial controls and safety and security controls.

As the valued outputs of the Project, a special guidance manual known as “Risk Analysis Guidelines” for the training and the daily work in the area of Risk Management and Risk Analysis was published and Business Strategy and National Action Plan was adopted to take the risk management system to a higher level.

After the new organizational structure in the government in 2011, the Ministry of Customs and Trade was established. Risk Management and Strategic Assessment Unit were shut down delegating all its physical and human resources with its duties and authorities to the DG of Risk Management and Control. Currently, Division of Risk Analysis under the mentioned DG is the sole organizational body responsible for risk management and risk analysis in all the fields of customs transactions. In addition to that, MoCT converted into the Ministry of Trade merging with the Ministry of Economy in 2018; however, the DG of Risk Management and Control preserved its statute and role in this new structure.

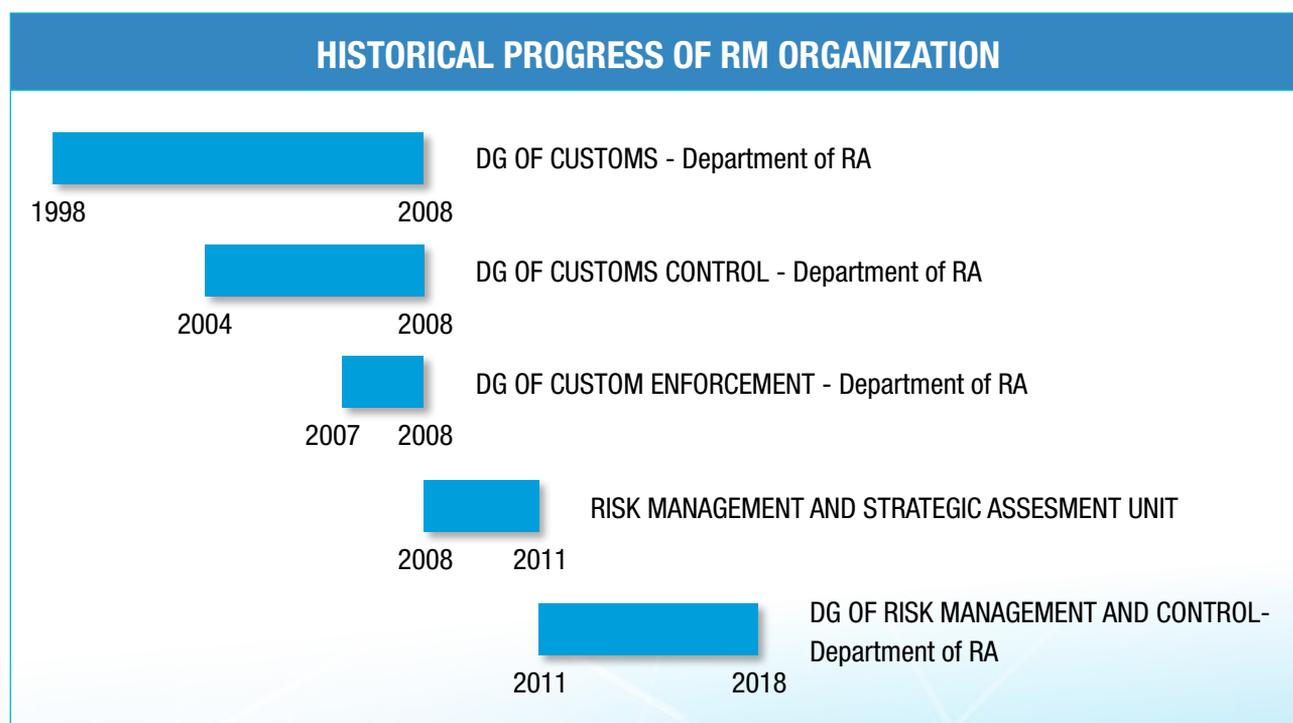


Figure 4: Historical Progress of Risk Management Organization

Besides those, Divisions of Risk Analysis - which are still functional- were formed under each Regional Directorates to deal with regional risk analysis and to serve as a bridge between the headquarters and the local in 2012. In addition, local customs offices with high volume of transactions have a risk analysis contact person.

3.3. The Organizational Structure of RM System

In the Ministry of Trade, Directorate General of Risk Management and Control that is responsible for central risk management is located under the Deputy Minister.

Directorate General of Risk Management and Control consists of Risk Analysis Department, Control Department, Statistics and Evaluation Department, Economic Analysis and Research Department, Trade Simplification Department, Electronic Customs Transactions Department, and Administrative Department.

The organizational chart of the Turkish Ministry of Trade is shown in Figure 5.

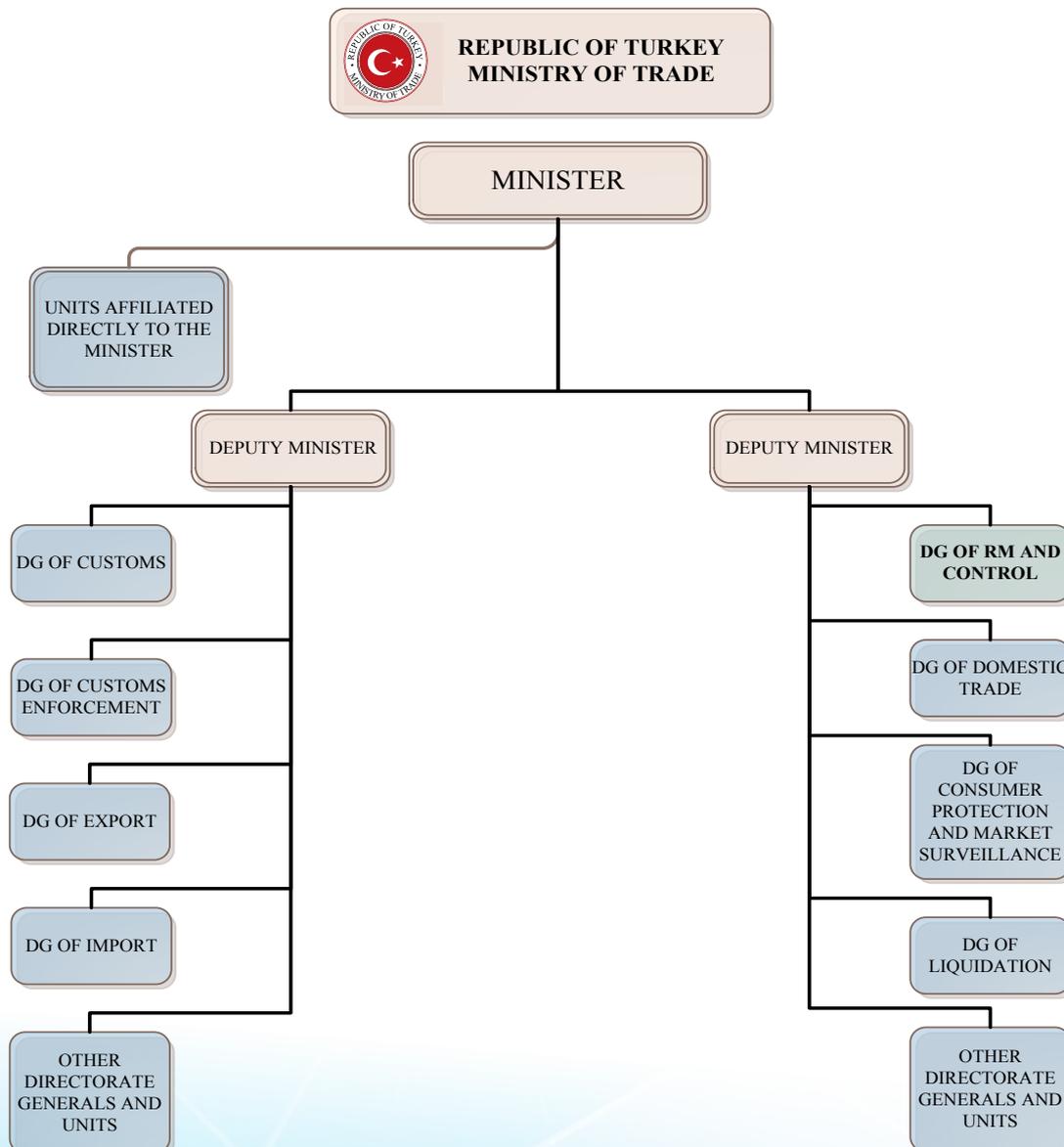


Figure 5: Republic of Turkey Ministry of Trade, Organizational Chart

Risk Analysis Department as a significant part of the Directorate General is responsible for risk management and risk analysis on a central level. A head of department represents it, and it consists of roughly 20 employees. Among the personnel are customs and trade experts and inspection officers. All the employees directly report to the head of department who is then responsible against Director General of Risk Management and Control.

The Department gathers all the available data from both internal sources and external sources. The most valued internal data comes from declarations, smuggling database, central registry system for companies, investigation reports, regional and local offices. External sources are other public institutions and administrations such as the Ministry of Agriculture and Forestry, the Ministry of Health, Law Enforcement Agencies; international cooperation, open-source data etc.

On the central level, there is also the Risk Assessment and Coordination Committee assembled under the presidency of Deputy Minister. The committee holds a year-end meeting with the participation of certain General Directors and Regional Directors. It has two fundamental agenda items: evaluation and realizations of the current year, strategic targets for the next year. During the committee meetings, statistics about the customs transactions, control line rates, central/regional risk profiles and activities of the current year are presented and evaluated. Any concerns or recommendations from the participants are noted. Finally, control fields of top priority, actions plans and estimated sizes of the physical checks are determined for the following year.

On the regional level, each directorate has its own risk analysis units consisting of sufficient number of inspection officers and enforcement officers. Regional Units can create risk profiles with limited authorization given by the headquarters. For example, for the time being, they can create solely import and export profiles but not transit or summary declaration profiles. Along with creating risk profiles, they can practice immediate physical check assignments. For instance, a certain bill of lading involved in a summary declaration or a chosen land vehicle could be assigned to physical control line. Regional Units are also responsible for gathering regional data regarding customs transactions and economic operations to map the risky fields, customs procedures, individuals or entities. Should the detections poses a national threat or concerns more than one Regional Directorate, they have to be forwarded to the central level via Risk Information Form. There are 18 regional risk analysis units having more than 60 employees in total.

Speaking of local level, certain local offices with high volume of transactions assign a risk analysis contact point. For instance Local Customs Office such as Ambarlı, Erenköy, Haydarpaşa in Regional Directorate of İstanbul or İzmir, Aliğa, Adnan Menderes, Çeşme in Regional Directorate of İzmir have a risk analysis contact point. They are responsible for collecting data or information

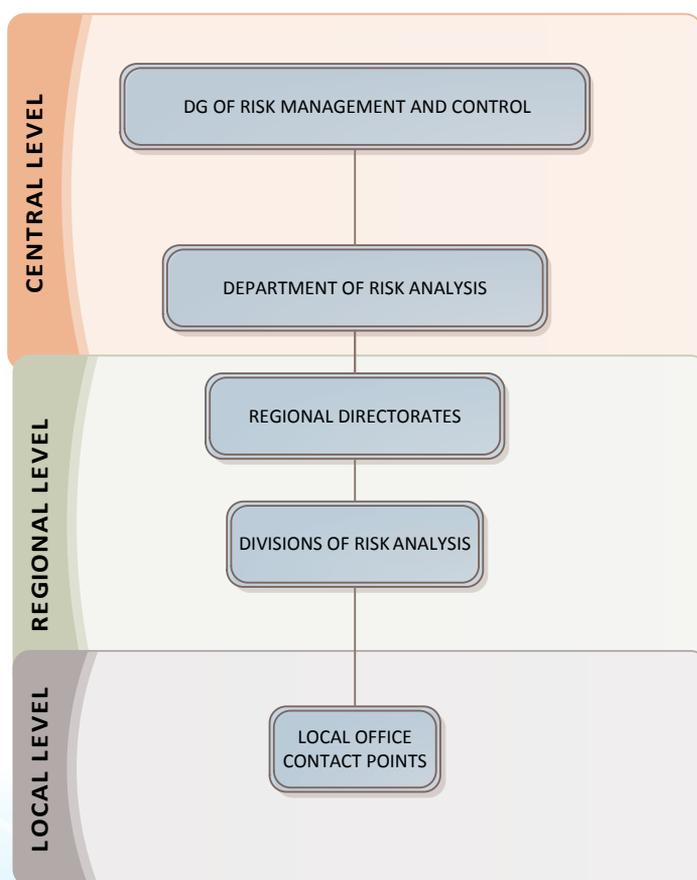


Figure 6: Turkish Risk Management System, Organizational Chart

about the transactions and economic operators typical to the local office; they also work for detecting transactions or operators not compliant with the customs law, regulations or administrative instructions. As a result, they convey these valued detections as well as other information like notices and warnings to the Regional Directorate to be treated accordingly. In some cases, certain actions must be taken at the national level by the DG of Risk Management and Control. In such as case, Regional Directorates must fill in Risk Information Form, which is a manual Form including data areas about potential or proven risks and send it to the headquarters.

3.4. Risk Management Process and the Functions of RM System in BILGE Modules

TCA has long been using an electronic system in order to target risky consignments or declarations in all customs procedures. The ultimate targeting tool is Risk Analysis Program through which risk profiles are created, updated and terminated. There are two dimensions of the risk analysis efforts: fiscal dimension, safety, and security dimension. Fiscal one deals with detecting non-compliant declarations or declarants in order to guarantee public revenue. Safety and security purposes of risk analysis is about food safety, human health, protection of environment, prevention of drug and cigarette smuggling, non-proliferation of weapons of mass destruction etc. The diagram below shows the process of risk analysis at TCA.

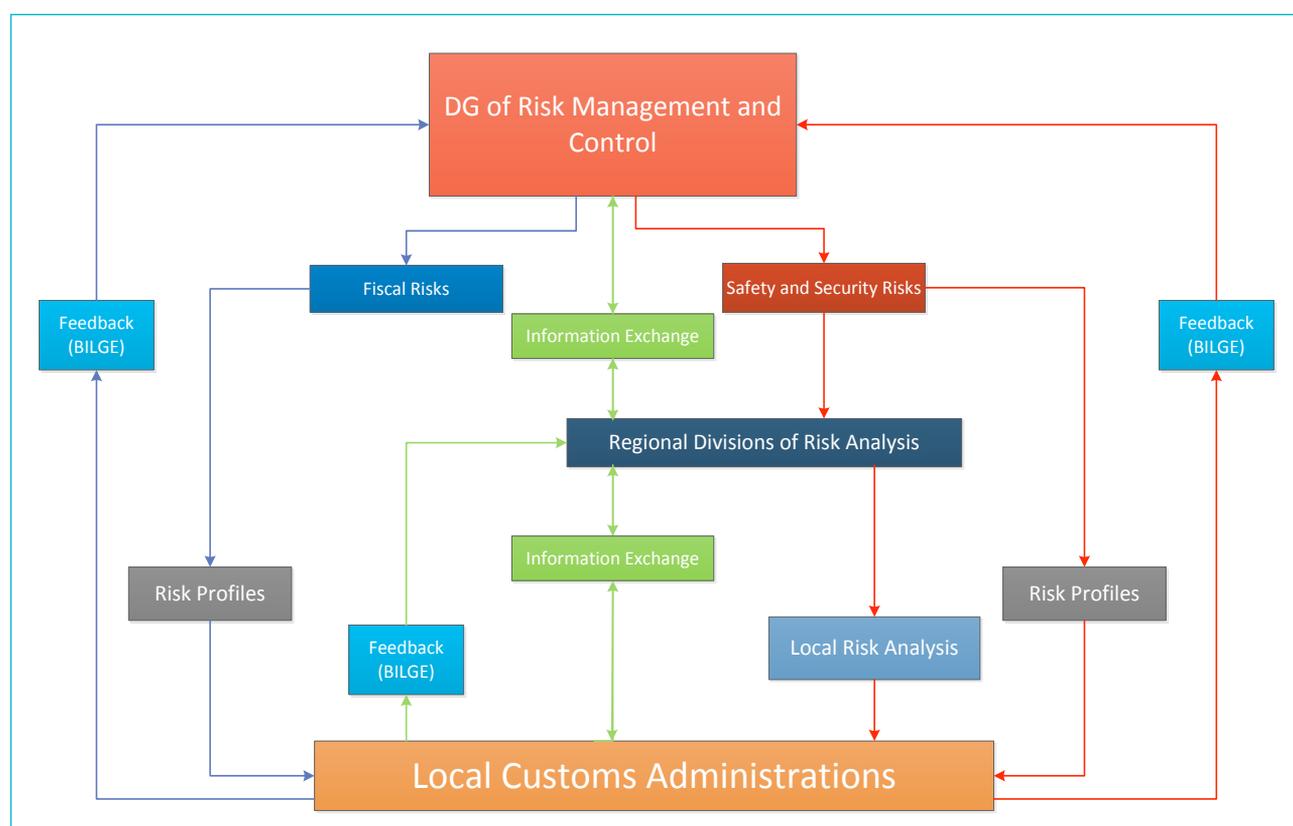


Figure 7: Basic Process of Risk Analysis at Turkish Customs Administration

At present, customs controls are conducted by means of risk-based methods on almost all declarations such as summary declarations (pre-arrival declaration), detailed declaration, TIR/Transit carnets, NCTS declarations and express cargo declarations etc.

As a result of the risk analysis and assessment, declarations are directed to red, yellow, blue and green lines. In addition to the risk-based controls that are applied selectively, “random” controls are also conducted. Customs controls are carried out in this direction. By the way, it is always up to the inspection officers in the field to conduct a more detailed control if they detect inconsistency with the documents even if the declaration has been assigned to the just document control line (yellow line) by the risk analysis system.

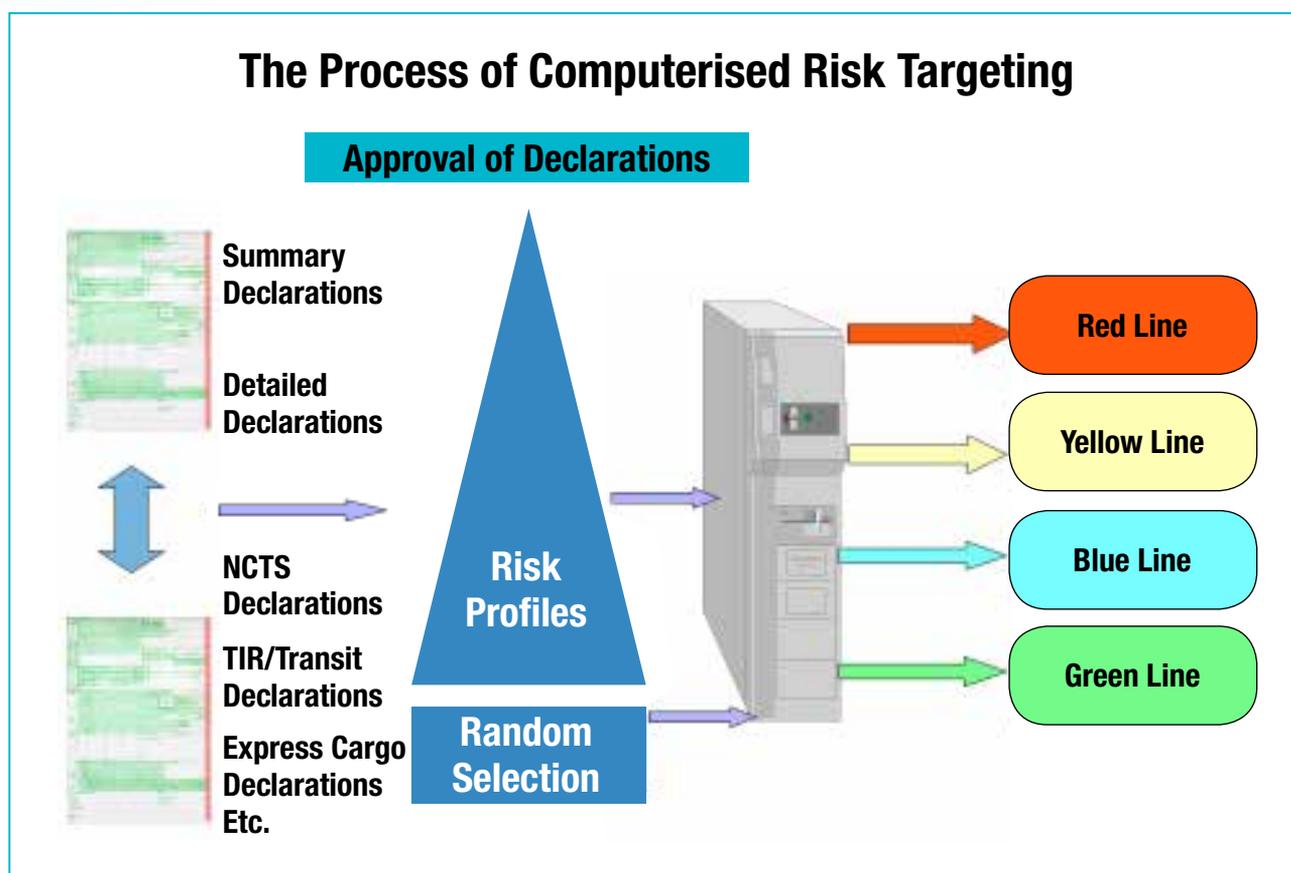


Figure 8: The Process of Computerised Risk Targeting

According to the article 180 of Customs Regulation:

- Red Line is the line on which physical check as well as documentary check are conducted.
- Yellow Line is the line on which only documentary check is conducted.
- Blue Line is the line that approved operators benefit in exportation, on which no documentary or physical control is conducted before the clearance. However, after the exportation, the customs office carry out the control of declarations assigned to the blue line on a simpler basis.
- Green Line is the line that only authorized economic operators (AEOs) benefit on which no documentary or physical check is conducted.

Central risk profiles targeting risky shipments, consignments or declarations are put into the system by the Department of Risk Analysis, which is overseen by the DG of Risk Management, and Control based in Ankara. Regional risk profiles are created by the divisions of risk analysis affiliated to the Regional Directorates. These profiles are created for a certain period of time. The risk profiles are revised as needed, and if necessary profiles are extended for an agreed time period. If the profile is decided to be no longer appropriate then they are terminated, but retained in the “history” file of risk profiles. Currently, more than 930 active national

risk profiles are deployed on the system. On the other hand, the number of active regional risk profiles on the system is almost 900. Risk Analysis Program - as explained before, the main tool used for setting and revising risk profiles since 1998 - has been modernized in 2017. Besides the risk profiles, alerts are delivered to the inspection officers in the field via the Message Program guiding them for risky areas.

Department of Risk Analysis at central level and Divisions of Risk Analysis at regional levels benefit from administrative documents, which specifies standard procedures as analyzing and assessing the risks.

In sub-chapters, important BILGE declaration modules will be discussed in terms of their functionality, data inside, and their use on risk analysis system.

3.4.1. Summary Declaration Module

3.4.1.1. Legislation

Entry summary declaration has to be given before the goods are brought into the customs territory of Turkey. As an exception for goods transported by non-stop vehicles within the customs territory, the summary declaration is given when the goods are brought into the Turkey customs territory. The summary declaration is submitted to the customs office of entry.

An entry summary declaration is not required for the goods listed below:

- Electrical energy,
- Goods coming with the pipeline,
- Letter, postal card and printed publications, including those containing electronic media,
- Goods carried within the scope of the International Postal Agreement,
- Pallets, containers ...
- Passenger goods,
- The goods to be declared with the oral statement,
- ATA Carnet and Customs Clearance Carnet (CPD) goods,
- TIR Carnet

Entry summary declaration is prepared using data processing technique. The form and content of the summary declaration is determined by the Customs regulation in a way that covers the information required for risk analysis and customs controls by making use of international standards and commercial applications for safety and security purposes.

3.4.1.2. The Entry Summary Declaration Module

The entry summary declaration module is included in the BILGE system, and it is an electronic interface to input the data regarding the declaration. Entry summary declaration numbers are used to make searches in the module.

General information about the entry summary declaration is displayed on the first incoming screen and it can be reached to the detail information by clicking on the waybills tab.



Genel Bilgiler

Tescil No

Belge Tescil No Beyan Türü Rejim Taşıma Şekli

Gümrük İdaresi Kalem Sayısı Ek Belge Sayısı

İlk Varış/ İlk Çıkış Yeri Tescil Tarihi Onay Tarihi Kapanış Tarihi

Yükleme/Boşaltma bilgileri

Yükleme Ülkesi Boşaltma Ülkesi

Yükleme Limanı Boşaltma Limanı

Sorumlu

Beyan Sahibi/Temsilcisi Vergi No

Taşıyıcı Firma Vergi No

Taşıtın

Adı Numarası Referans Numarası Ülkesi

Dorse No1 Uyuşu Dorse No2 Uyuşu

Varış Tarihi ve Saati

Referans

Önceki Beyan No / Ana Konşimento No Grup Taşıma Senedi No

TIR/ATA Karne No Kurye

Emniyet ve Güvenlik (EG)

Diğer

Kaynak

Eşyaya İlişkin Bilgiler

Taşıma Senetleri Taşıma Satırları-İhracat Satırları-Uğranan,Uğranacak Ülkeler-Eşya Satırları

ONAYLANMIŞ

Taşıma Senedi Senet Sıra No

Taşıma Senedi No ÖZBY No Düzenlendiği Ülke

Fatura Toplamı Döviz Önceki Seferin: Numarası Tarihi

Navlun Tutarı Döviz

Ödeme Şekli B Eşyanın Bulunduğu Yer GEMI İlgili Özet Beyan No E-İmzalı

İlgili

Gönderici Vergi No

Alıcı Vergi No

Bildirim Tarafı Vergi No

Acenta Vergi No

Statü

GD Başlangıç Tarihi GD Süresi Ek Süre

Grup Ambar Harici Konteyner Kapalı Bloke

Tir Karnesi Emniyet ve Güvenlik (EG) Aktarma

Risk Durumu 0-RİSK TESPİT EDİLMEDİ

Açıklama

In this way, it can be seen which waybills are directed to physical control. Some waybills that contain “FK” on the side, which means that they are directed to physical control by code 2.

As it is stated in both Turkish and EU's customs codes, an entry summary declaration is a fore-declaration that does not bind the declarer in terms of duties, taxes and other detailed formalities, but bind only of safety and security measures. Turkish customs perform safety and security controls through X-ray controls, dedector dogs, and channel or hangar inspections. All of those performances were directed by the summary declaration risk analysis module. If there is a risk for fiscal terms, customs office directs the transaction to detailed decalartion module in order to be thoroughly inspected.

3.4.1.3. Risk Analysis on the Entry Summary Declaration

In Turkey, starting from 2012, entry summary declarations are given before the arrival of the goods. In order to carry out risk analysis, necessary infrastructure studies were completed in BILGE system and entry summary declaration risk analysis was started to be applied in all sea customs on 01.11.2012. As of April 2013, risk analysis studies were initiated in customs directorates where air import entry summary declarations were given.

This application is carried out through the central risk profiles formed by the headquartes and through the Risk Analysis Offices operating within the Regional Directorates locally.

After the completion of the risk analysis studies, if the results are found to be suitable, the goods declared to the customs may be subject to a customs-approved transaction or use.

Since entry summary declarations can include more than one waybill/manifest, summary declaration risk profiles work on waybills.

Main areas used in risk analysis of entry summary declaration;

- Receiver Name
- Sender Name
- Definition of Goods
- Brand No (Container No)
- Gross weight
- Country
- Loading Land / Port
- Country / Port of Goods
- Payment method
- Agent Name / Tax ID
- Declaration Name / Tax ID
- Carrier Name / Tax ID
- Notification Party Name / Tax ID

3.4.1.4. Workflow of Risk Analysis on the Entry Summary Declaration

Entry summary declaration can be defined as the statement of the commercial goods and other related information such as number of items, consignor, consignee, weight etc. submitted electronically before the arrival to entry customs office with the purpose of making a safety and security risk analysis of the cargo entering into customs territory of Turkey. Entry Summary declaration includes more general information compared to the detailed declaration and filled in accordance with the annex form of customs regulations. The mostly used data for the purpose of risk analysis is the decription of the goods, the country of loading, the country of the contract, importer ID, and exporter name.

Customs administrations, using the information contained in the summary declaration, realise the safety and security risk analysis before the arrival of the goods to the customs territory of Turkey.

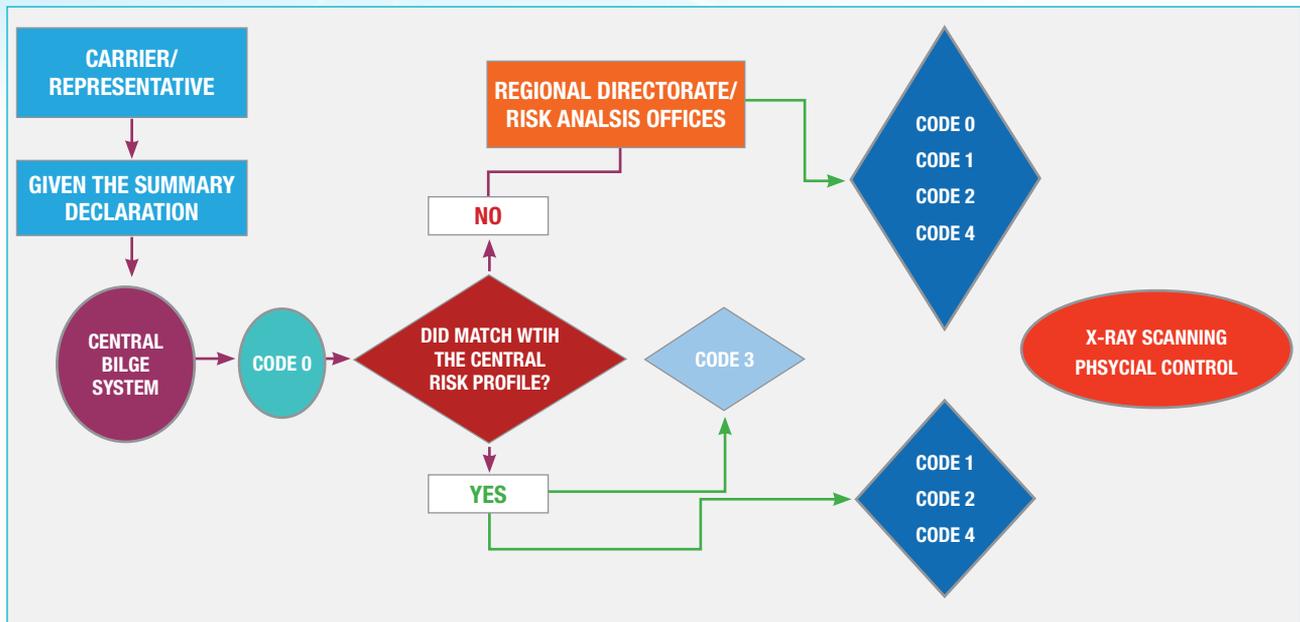


Figure 9: Workflow of the Risk Analysis on the Entry Summary Declaration

1

Entry summary declaration is given by person who brings goods into customs territory of Turkey or who is responsible for carrying the goods into the customs territory.

2

After the registration of entry summary declaration, risk profiles are run in fields of declaration at the background of the BILGE system.

Related to entry summary declaration transactions conducted the safety and security risk analysis. If deemed necessary, a financial risk analysis is also performed.

During the risk analysis and targeting, the controll of the entry summary declaration, financially thought to be risky, is carried out by directing them to the physical control.

3

DID IT MATCH WITH THE RISK PROFILES?

If an entry summary declaration matches with central risk profiles, there are two options. One of these, to direct to Code 3 for decided whether or not to be controlled by the Risk Analysis Offices. The other is it can be directed to Code 1, 2 or 4.

If an entry summary declaration does not match any central risk profile, it can be evaluated by Risk Analysis Offices at the Regional Directorates. After the evaluation of risk analysis offices, a declaration can be directed to Code 0, 1, 2 or 4 according to risk situation.

The codes change according to risk factors, such as in the event of no risk factors Code 0, in cases where there is a prohibition of loading Code 1 and so on. Some codes enable both central and regional customs offices to send suspicious goods and transports to X-RAY checks or detailed inspections.

3.4.2. Detailed (Single Administrative Document-SAD) Declaration Module

3.4.2.1. Legislation

Pursuant to Customs Law Article 1, “the purpose of this law is to determine the customs rules to be applied to goods and vehicles entering the customs territory of the republic of Turkey.”

A Financial Risk Analysis is conducted in the detailed declaration module in the BILGE system. Since the detailed declaration module consists of import and export transactions, these transactions are subjected to risk analysis in the same module, being aware that risks in exports and imports vary.

In general, import is the entry of goods from abroad to a country. In other words, import is the process of entry of goods produced in another country by paying taxes or without paying temporarily or surely. In Turkey, import regime is regulated according to import regime decision, import regulations and import communiqué. Besides all of this legislation arguments regulate import activities, bring some fiscal restrictions, extra taxes and other trade measures.

Export regime can be expressed to goods in free circulation to remove from Turkish custom territory or to send free zone or other export and transactions to be accepted to export on the purpose of export.

Despite being evaluated within the same module, the risk analysis department uses different parameters in analysing of import and export operations. Next section will touch on risk parameters of those transactions.

3.4.2.2. Detailed Declaration Module

The detailed declaration module is included in the BILGE system, all information about declaration transmit from this system to other databank like GÜVAS. At the detailed declaration module can be searched declaration general and specific data with declaration number.

General data of the detailed declaration is displayed on the first incoming screen and further details can be reached about declaration by clicking inspection/control tab.

Bitiş İşlem Dairesi Başkanlığı - BİLGİ - Detaylı Beyan

Nesne | Bağlantılar | İşlemler | TCGB Memur İşlemleri | Hakkında

Kalemler

- TCGB Tescil
- Muayene/Kontrol
- Özet Beyan Açmaları
- Diğer Alıcı
- Diğer Gönderici
- Kapanmış Beyanname
- Detaylı Beyan Kısa Yol
- Haberleşme
- Kıymet Bildirim Formu

Detaylı Beyan

Genel Bilgiler | Firma/Kısmi Bilgiler | Finansal Bilgiler | Taahhüt Bilgileri | Özet Bilgiler

Kullanıcı: [] Gümrük: 343200 [] 37.Rejim: 4000 [] Beyan: İM 4

Alıcı/Sabotaj İlişkisi: 6 [] 19.Konteyner: HAYIR [] B.S.: []

24.İşlemin Niteliği: 11 [] 11.Ticaret Yapılan Ülke: 720 [] 15a.Çıkış Ülkesi: 720 []

Telaflı Edici Vergi: 0 [] 10.Gideceği/Sevki Ülkesi: 720 [] 17a.Gideceği Ülke: 052 []

Kalem Sayısı: 2 [] Açıklamalar: []

4.Yükleme Listesi: 1 []

6.Kap Adedi: 2 []

7.Ref. No: 18-00891 []

Gümrük İdarresi Notları

Mühür Sayısı: No [] Çıkış Süresi: [] Rejim Bilgi Tarihi: []

Açıklama: [] Çıktı Seri No: []

Diğer

Tescil Tarihi: 08.10.2018 [] Onay Tarihi: 08.10.2018 [] Kapanma Tarihi: 08.10.2018 []

Referans Tarihi: [] Birlik Kayıt Numarası: [] Birlik Kriptosu: []

At the screen of inspection/control can be reached details such as lines, officer who is appointed to control, tariff and risk messages etc.

Hareketler | İşlemler | Bağlantılar | Muayene Kontrol

TCGB NO: [] KARAR: Tamam Bloke

Memuru Değişme Sebebi: []

Atanan Memur: [] Seçim Türü: KIRMIZI

İşlemi Yapan Memur: [] Beyan Sahibi Kabulü Kıymet Araştırması

Yapılan Muayene Türü: TAMMUAYI [] Ertelemiş Kapatma Menşei Araştırması

İşlemi Yapılacak: [] Tabii

Açıklama: UYGUN Tahlile Gitmeyecek

Emsal Rapor Kabul Edildi

Tarife Tespiti Kapsamında Tahlile Gidecek

PGD Kapsamında Tahlile Gidecek

G.Y. 196/6 Kapsamında Tahlile Gidecek

G.Y. 130/3 Kapsamında Tahlile Gidecek

G.Y. 545/2 Kapsamında Tahlile Gidecek

Mesajlar | Muafiyetler

Vergi ve Belgeler (Farklılıklar) | Numune Raporu Görüntüle

Tarife Mesajları | Tarife Soruları | İhlaller | DİB Mesajları | Risk Profili | Laboratuvar İşlemleri | H.Muayene Bilgileri

KalemNo	Tip	Mesaj
1	MERKEZİ	Dikkat: Bu yükümlünün daha önce gümrük işlemi bulunmamaktadır. Yeni gümrük işlemi yapmaya başlamıştır. Yapılacak kontrollerde bunu dikkate alınız. Bu

Mesaj Bilgileri

3.4.2.3. Risk Analysis on Detailed Declaration Module

In general, risk analysis at customs is built on three pillars. It is valid for all declaration modules including detailed declaration module. All three can be used for both fiscal and safety and security purposes.

The first one is named as **Fact-Based Risk Analysis**. In this process, historical data, which was proven to be non-compliant with the customs legislation or against Anti-Smuggling Law, is used as determining the declarations or vehicles to be channeled to physical control line. The foremost resources can be counted as reports of investigation, data on Anti-Smuggling Database, denunciations, administrative fines and additional tax computations etc. If a potential risk factor has already been violated, the risk factors should be monitored closely.

The second one is called **Potential Risk Analysis**. This method includes assessment of the declaration data and other related resources. The risk indicators on the declarations are determined, and put on the systems as risk profiles. It is potential because it has a probability to break the law or not to be consistent with the regulations, but it is not proven yet.

The last pillar is based on **Random Selection**. Random checks are determined by the system according to a certain volume or count settled on before. The main purpose behind the random selection is to form an understanding that any declaration can be subjected to physical control at any time.

3.4.2.4. Workflow of Risk Analysis on the Detailed Declaration

All risk profiles are integrated to BILGE System, which covers all customs operations. After the submission of declarations, risk profiles run on the system. This section mentions the stages of risk analysis of detailed declaration.

First step: Conducting analysis on the data obtained from various sources such as new regulations, intelligence, disciplinary actions, anti-smuggling data bank, inspection reports, administrative fines and penalties, etc.

Second step: Risk assessment is carried out as result of the risk analysis, considering the effects and possibilities.

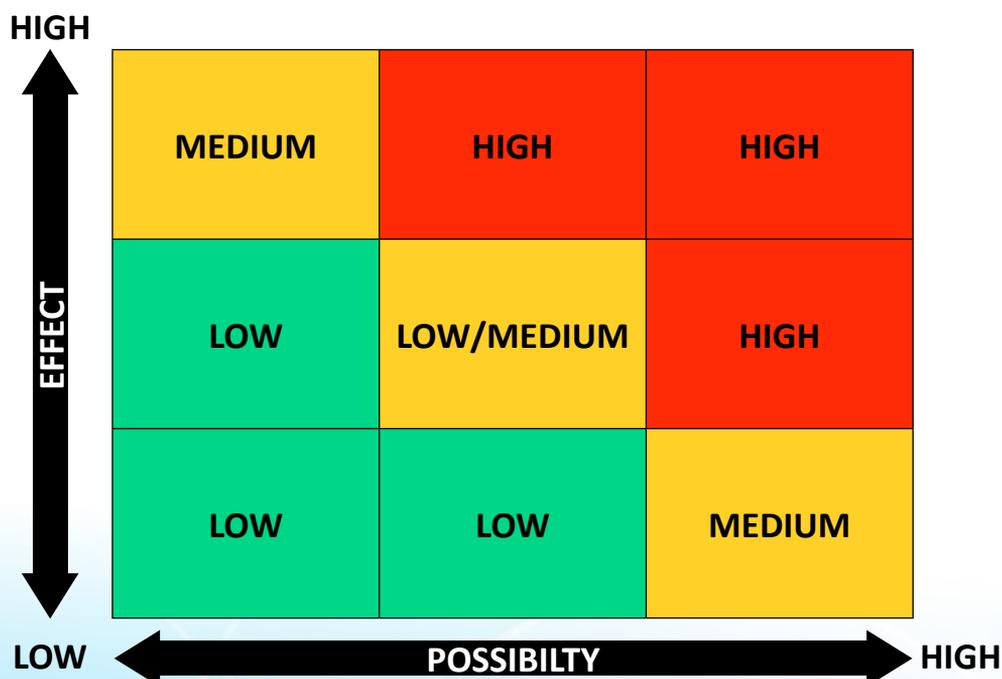


Figure 10: Effect/Possibility Diagram

Step three: Risk analysis form including risk factors, the type of examinations, and the duration of profile is prepared and submitted for the approval.

Step four: Following the approval of the risk analysis form, the risk profile is immediately introduced to the Risk Analysis Program.

If the data contained in the declaration matches with the risk profiles, the detailed declaration is routed to the line and control type, which was determined by the risk profile.

Red line (Physical Control): Inspection of goods together with document checks.

Yellow line (Documentary Control): The crosscheck of declaration and attached documents. If necessary, yellow line can be turned into red line.

Blue line: It is a special export line that entities who have been approved status determined by the Ministry and the goods are not subjected to physical/documentary control. Post clearance audits are performed.

Green line: Goods are not subjected to document and physical checks. Post-clearance audits are performed.

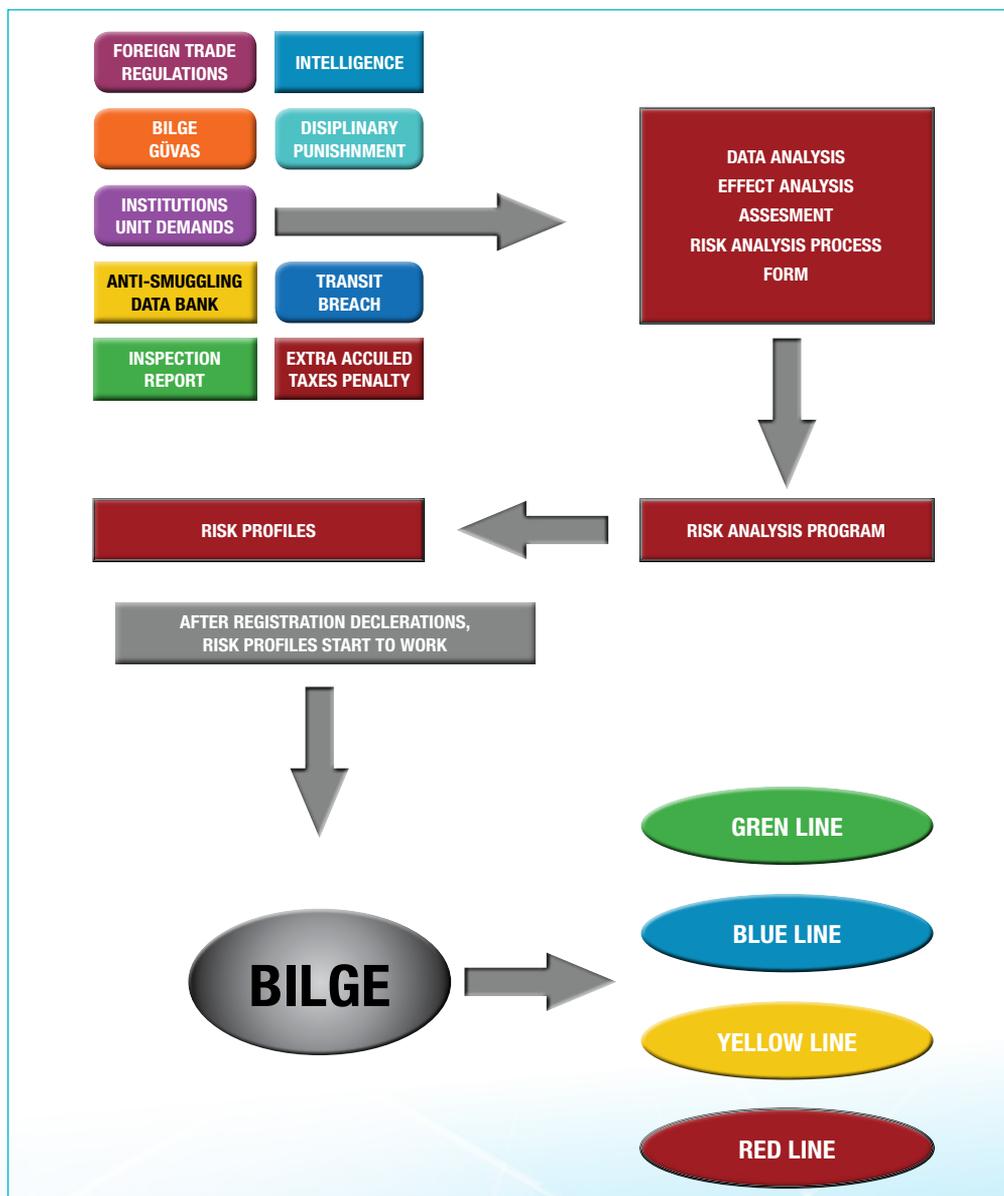


Figure 11: Workflow of Risk Analysis on the Detailed Declaration

As the profiles work at the entrance of the goods in imports and at the exit of the goods in exports, the risk parameters and priorities are different from each other. For instance, risks can be related to value added tax, import duty rates, tariff quotas, anti-dumping duty, requested documents, prohibition on foreign trade policies, and applications of restriction and permission applications in import declarations. Whereas priorities can be illicit export, arms smuggling, high tax or prohibited goods, dual-use goods, historical artifacts or trafficking of protected animal and plant species in exports.

The main areas used in risk analysis of import declarations;

- Origin,
- Regime,
- HS Code,
- Value,
- Sender,
- Receiver,
- The country exit,
- Definiton of goods,
- Amount of goods,
- Representative,
- Customs broker,
- Payment method,
- Customs administration
- Intellectual property rights,
- The country of origin,
- Simplified procedures.

Some areas used in risk analysis of export declaration;

- Inward processing regime tracking,
- Dual-Use Goods,
- Export of weapons,
- Exporters/Carriers,
- Manufacturers.

3.4.3. TIR/Transit Module

3.4.3.1. Legislation

The world's most important and most comprehensive customs road transit system is the TIR System based on the 1975 TIR Convention. The system allows the goods to be transported internationally from a transit customs office to a destination customs office without interfering border controls.

The TIR Convention is part of the United Nations Economic Commission for Europe (UNECE) and is the largest transit system in the world with 72 Contracting Parties and 59 countries implementing the system.

The TIR Carnet is the administrative backbone of the TIR System. It is published by the International Road Transport Association (IRU) and is distributed to the national guarantor organizations for the delivery to the transporters. It is a document that has an international guarantee and it replaces the customs declaration.

3.4.3.2. Risk Analysis on the TIR Carnet Module

Risk analysis fulfilled within the scope of TIR Carnet is carried out for safety and security purposes. Risk profiles that are used in transit transactions work in connection with the TIR Carnet as well. As a result of the operation of the risk profiles, inspection lines (Red or Yellow Line) of the TIR Carnet are determined.

The profiles of TIR Carnet are prepared, modified or cancelled according to ex officio, requests from other service units or from other organizations.

The result of the risk profiles and its related messages are displayed on the inspection screen to the inspection officer.

According to the technical infrastructure, the same risk criteria are used in NCTS and TIR Risk analysis.

Main types of irregularities encountered:

- Goods Trafficking,
- Drug trafficking,
- Human trafficking,
- Fuel smuggling,
- Tobacco / alcohol smuggling,
- Weapols / WMD,
- Trafficking of cultural and natural assets etc.
- CITES-related trafficking

3.4.3.3. Workflow of Risk Analysis on the TIR Carnet

The entry process of the TIR Carnet is made with the V1 page and the exit process is made with the V2 page.

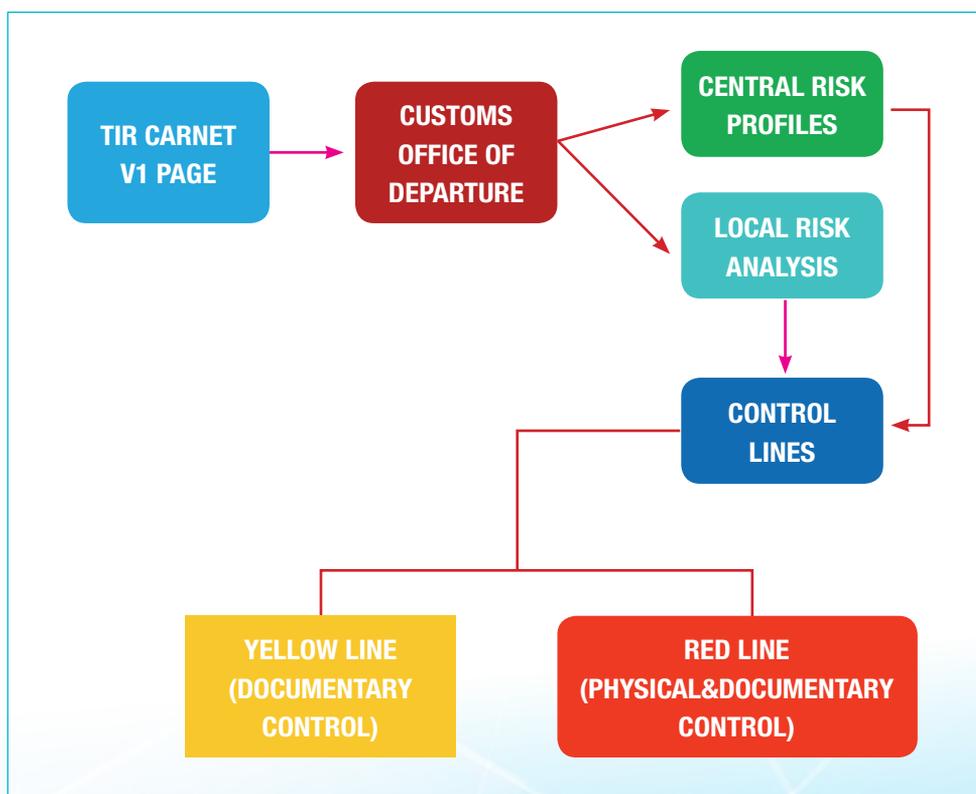


Figure 12: Entry Process of the TIR Carnet

For transactions made within the scope of TIR Carnet, Volet-1 page are subjected to risk analysis on the system at the customs office of departure. TIR Carnet transactions are carried out after the vehicle enters the customs area.

In the Customs office of departure, the TIR Carnet passes through the risk profiles generated in the V1 module. There are two lines, red and yellow, in the TIR module.

After the inspection and controlling, the vehicle is allowed to continue transit operation and transactions in the Customs office of departure shall be terminated.

When the vehicle carrying the transport within the scope of the TIR Carnet arrives at the Customs office of destination, the V1 and V2 pages of the TIR Carnet are matched and the TIR process is terminated.

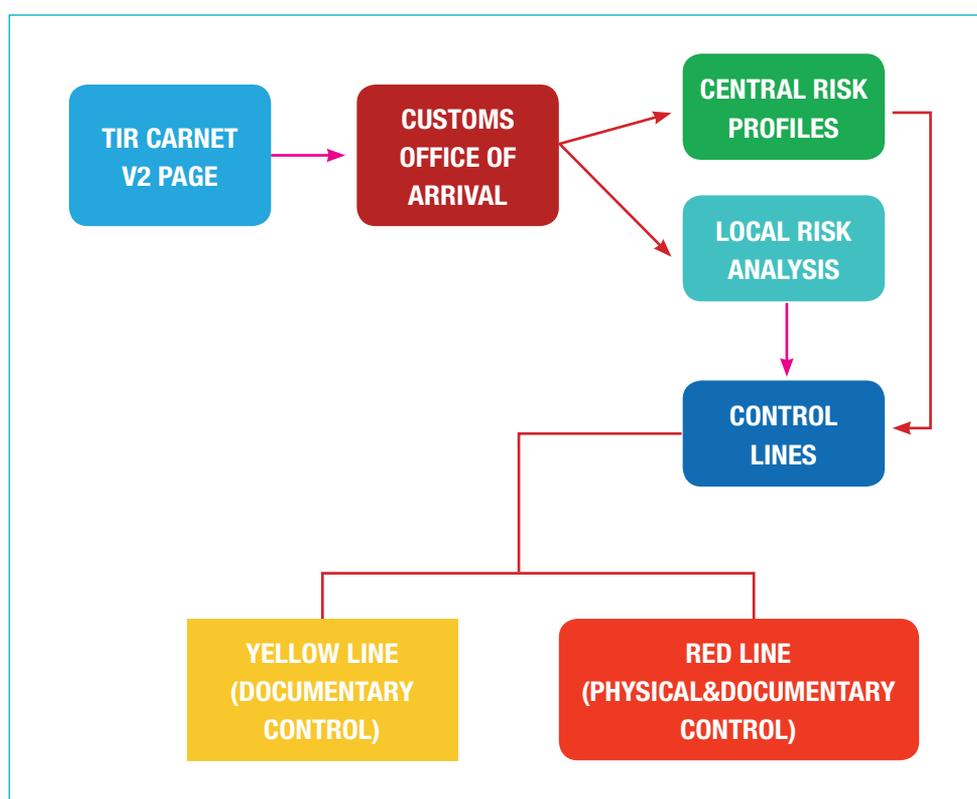


Figure 13: Exit Process of the TIR Carnet

In the customs office of arrival, a risk analysis is carried out on the V2 page, similar to the V1 page.

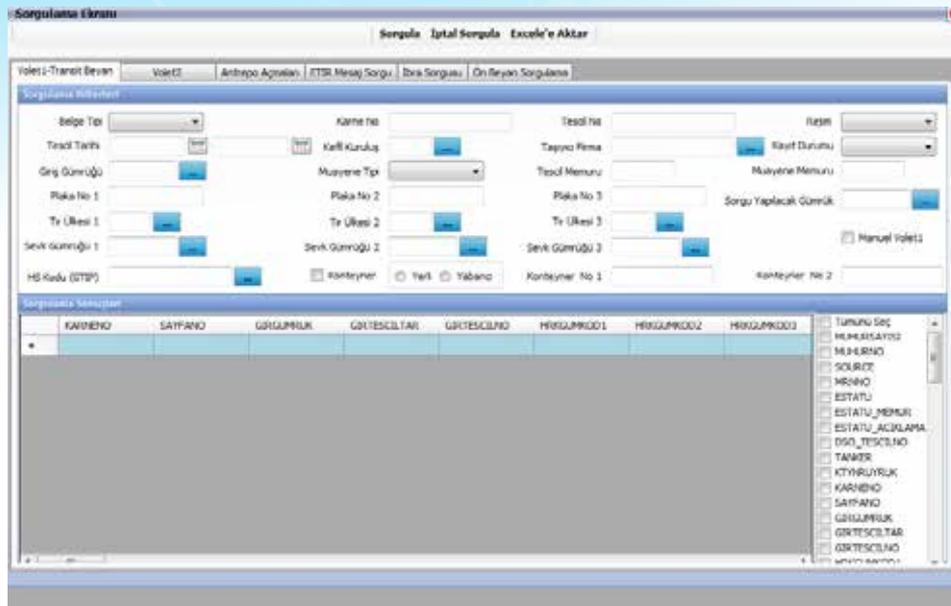
3.4.3.4. TIR Carnet Risk Analysis Module

The TIR Carnet module is included in the BILGE system and can be accessed with the number of TIR Carnet.

And also in the specific date range, the query can be made on the basis of customs administration.

As stated above in different circumstances, risk analysis is performed both central and regional levels. The central one is fulfilled by the Risk Analysis Department of the Ministry, whereas the local one is done by regional customs directorates and offices. When it comes to TIR, NCTS and Land Border risk analysis techniques, local offices play a significant role since they have some unique capabilities. They may use instant profiling very effectively, often, with the help of local customs enforcement offices, a speciality that central authorities lack.

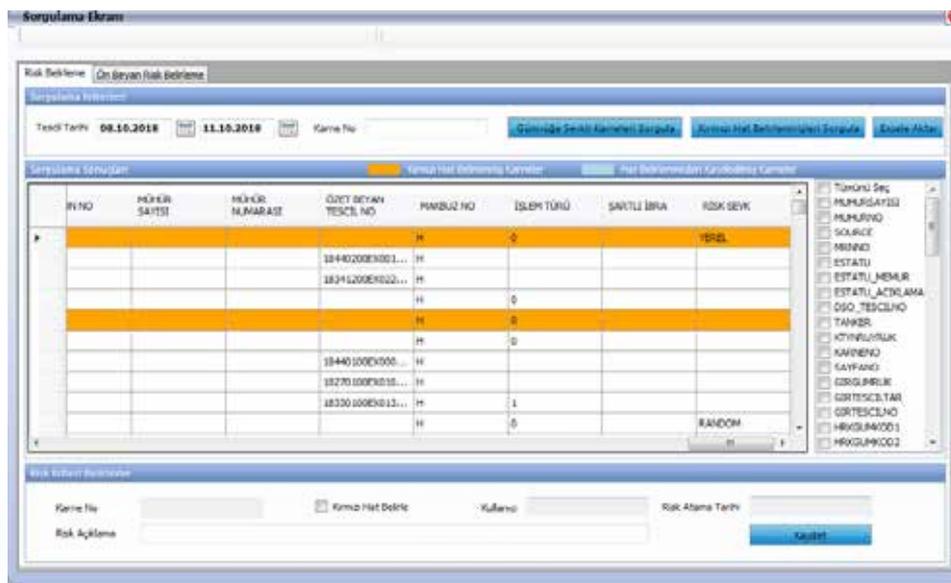
Both central and regional levels, all boxes of the road transport documents (TIR, CMR, Loading/Packing List, Delivery Note, etc.) can be used as risk indicators. In addition, these documents can be used as a basis for the control of the customs declaration to compare the given data.



Main pre- and post-arrival risk indicators for road transport are as follows:

- Driver
- Carrier Company
- Origin of the goods
- Goods
- Transport time
- Vehicle type
- Pre-paid or cash-paid shipment
- The vehicle is in poor condition or old
- The vehicle has been used for smuggling previously
- Repair and modification traces on the vehicle
- The documents are inconsistent with the weight of the goods
- The goods are in poor quality

All details of the TIR Carnet such as carrier, goods, vehicle information, and risk status can be seen on the inquiry screen.



3.4.4. New Computerized Transit System (NCTS) Module

3.4.4.1. Legislation

As of 01.01.2012, Turkey has started to use NCTS in national transit transactions. After completion of legislative framework for adoption of CTC in national level Turkish Parliament have adopted “Common Transit Convention” and “Convention on The Simplification of Formalities in Trade in Goods”. As of 01.12.2012 TCA have started to use Common Transit System in transit transactions with EU and EFTA countries.

Throughout this period, TCA has;

- Integrated the national software (BILGE) with NCTS.
- Allowed using EORI numbers while declaring and using guarantees.
- Held periodical training programs.
- Designed and applied workflow for goods placed under warehouse regime after transit operation is terminated.
- Integrated Risk Analysis System with NCTS module.

3.4.4.2. Risk Analysis on NCTS Module

Risk analysis on NCTS are conducted on both central level and local level. Like other modules, central risk analysis on NCTS module are performed by creating risk profiles through Risk Analysis Program. Risk analysis is carried out on the goods placed under transit procedure primarily for security and safety purposes, on the basis of risk indicators, such as:

- Information about transporter, consignee, consigner;
- Previous transactions of transporter, consignee, consigner;
- Smuggling data bank records;
- Type of the freight;
- Destination.

Furthermore, risk analysis is carried out with regard to certain goods (such as beet sugar) where customs frauds (especially “fictive export”) are densified. In addition to this, the goods on which the burden of duties are high, and which are liable to restrictions and commercial policy measures are also considered.

NCTS risk profiles are designed carefully in order to avoid duplication for physical controls applied on NCTS and full declaration.

Unlike central level, local risk analysis units are not authorized to create risk profiles for land border controls. Local land border risk analysis is performed through the NCTS module.

NCTS module support local risk units with regard to:

- Instant targeting,
- Analysis of the previous transactions.

3.4.4.3. Workflow of NCTS Risk Analysis

NCTS risk analysis workflow for transit procedure splits into two as arrival or departure.



International Arrivals

After finishing safety and security procedures through central risk profiles at customs office of transit, declared goods transferred to customs office of destination. NCTS-based risk profiles and pre-arrival local risk analysis begins to run on the declarations. Afterwards, declarations are directed into lines as red or yellow.

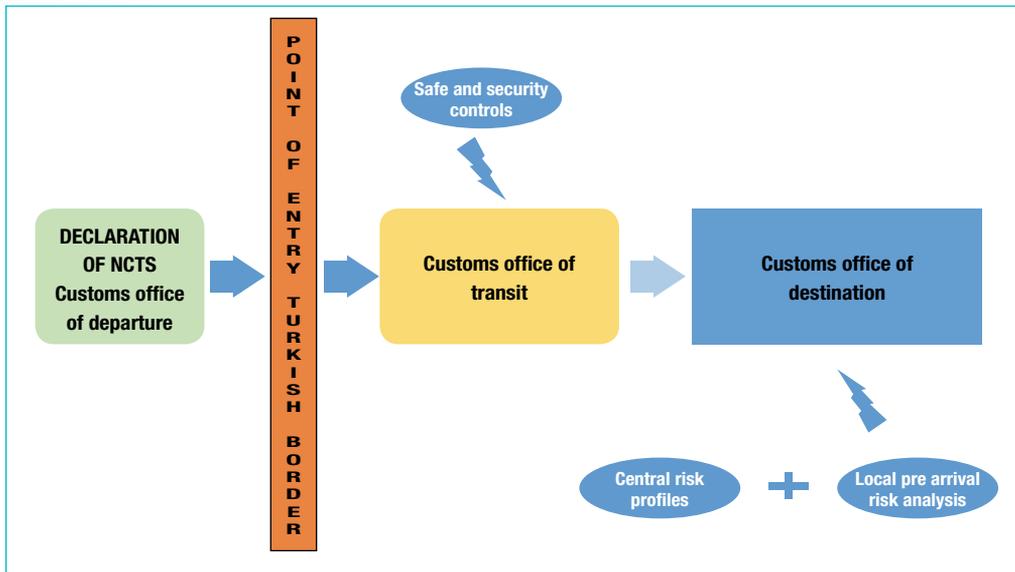


Figure 14: Workflow of NCTS Risk Analysis, International Arrivals

International Departures

NCTS-based risk profiles run on the declaration and the declaration is routed to red or yellow channels. Following the customs clearance, the declaration is forwarded to “customs office of transit” where the declaration might be targeted by safety and security controls through central risk profiles and pre-arrival local NCTS risk analysis.

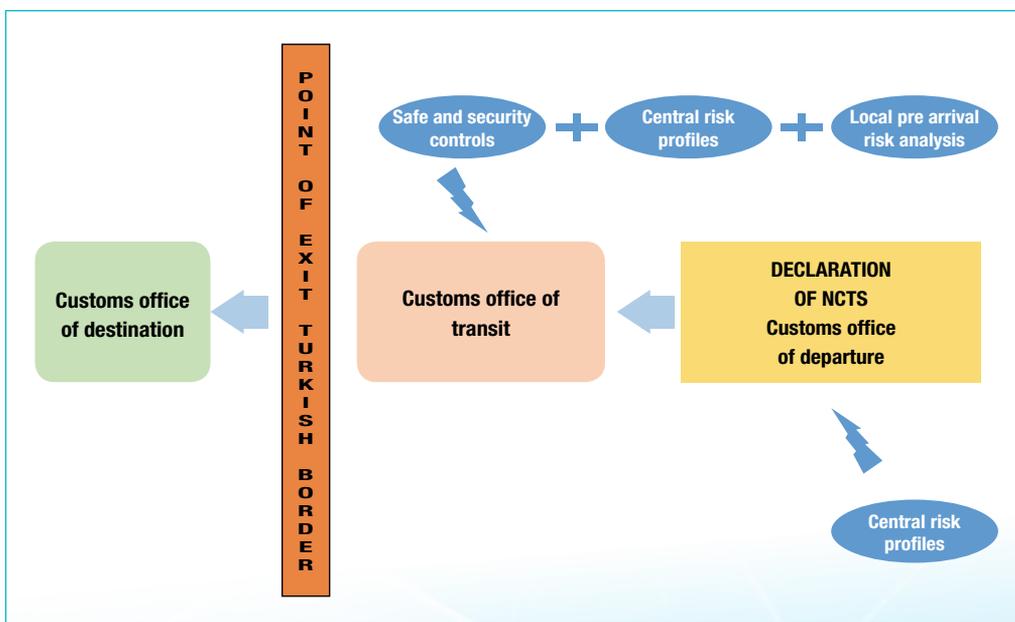
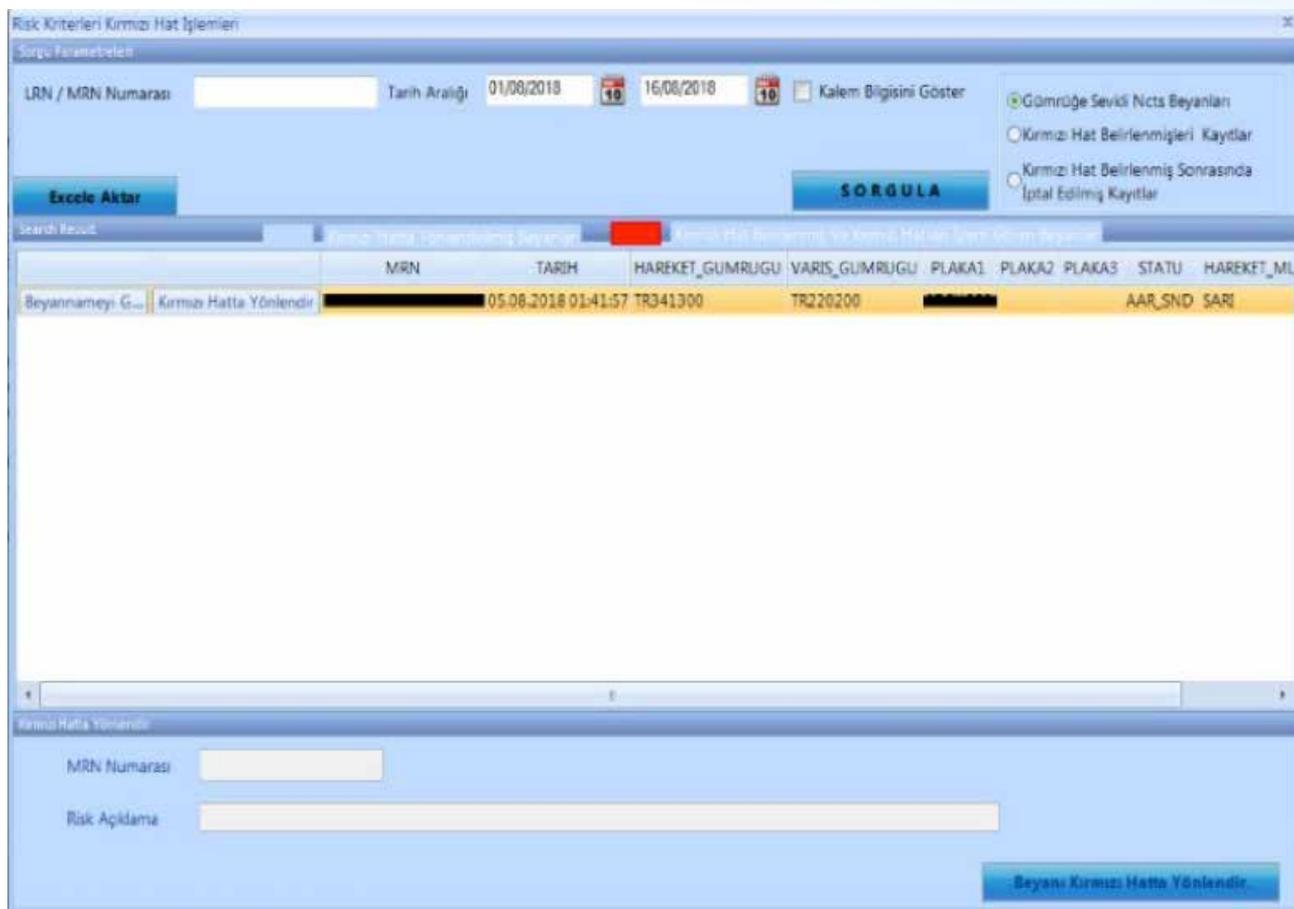


Figure 15: Workflow of NCTS Risk Analysis, International Departures

3.4.4.4. NCTS Risk Analysis Module

Local Risk Analysis Units are able to analyze and target NCTS declarations coming through relevant customs offices using BILGE-NCTS module by making queries. After the targeting, the declaration is tagged with red line with an alert notification. These alerts inform inspection officers in the field on the checks of top priority.



3.4.5. E-Trade Customs Declaration Module (ETGB)

3.4.5.1. Legislation

It is stated in the Turkish Customs Code (4458/Article 225) that “The Postal Services or the express cargo carrier companies may be authorized as indirect representative for the proceeding and finalization of the assigning of a customs-approved treatment or use to the goods which were brought in or consigned by mail and express cargo carriage, and whose amount and value will be determined by the Presidency.” In accordance with this article, several sub-regulations have been published.

One of the most important sub-regulations is the Council of Ministers Decision 2009/15481. It is stated in the 126th article of the decision that fast cargo transportation companies containing the conditions determined by the Postal Administration and the Ministry are authorized as indirect representatives of follow-up and finalization of activities related to all customs procedures, including customs declaration of goods with no significant value, goods subject to export regime of which gross weight not exceeding 30 kilograms and value not exceeding 7.500 Euros, goods with a value of up to 1.500 Euros and with the exception of diplomatic goods and passenger goods, goods with no commercial quantity and nature to subject to release for free circulation of which gross weight not exceeding 30 kilograms, sample goods and models, book or printed publication.



In the 45th article of the same decision, it is indicated that exemptions are granted to goods delivered to natural persons in Turkish Customs zone by mail or fast cargo transport of which cost not exceeding 22 Euros per shipment and to books or printed publications for personal use of which cost not exceeding 150 Euros.

According to the Circular numbered 4, consignments coming from abroad classified into four categories after fulfilling barcode and X-Ray controls.

- Documents and goods subjected to document checks
- Other consignments subjected to document checks
- Consignments subjected to examination by customs
- Consignments, which are out of authorization.

The circular states that consignments, which are in the field of authorization, are controlled and examined on the basis of risk analysis.

3.4.5.2. Risk Analysis on Express Delivery Module

Risk analysis on fast shipping is implemented on mainly central level by using risk profiles and on local level by customs officers working in the field. Electronic trade customs declarations are used in fast shipping transactions and risk profiles on those declarations have been created since 2012.

Main risk indicators and parameters are:

- Number of Packages,
- Package Type
- Declarant/Name of Agent and ID numbers
- Statistical Value
- Sender/Exporter
- Recipient Name and ID
- Country of Destination
- Trading Country
- Origin Country/Exporter Country
- Commercial Description of Goods
- State of Origin
- Gross/Net weight

Risk profiles or rules are built on the Risk Analysis Program regarding customs declarations registered within the scope of fast cargo transportation. By means of aforementioned risk profiles, proceedings are followed on the basis of transport bills. Transport bills, which are considered risky, are redirected to the red line.

Within this scope, risk profiles are created for safety, security and financial purposes by taking into account the mandatory and discretionary information contained in the transport document attached to the electronic commerce customs declaration since 2012. Export country-based risk profiles are created in the event that export country is considered risky.

Commercial definition-based risk profiles are created in the case that goods in concern are subjected to a prohibition or permission.

'Recipient' and 'Exporter' based risk profiles are created by comparing the 'Recipient' and 'Exporter' names in e-trade customs declaration system with the names in Anti-Smuggling Databank.

Besides, risk profiles are created where commercial definition-exit country and commercial definition-gross weight domains are evaluated together.

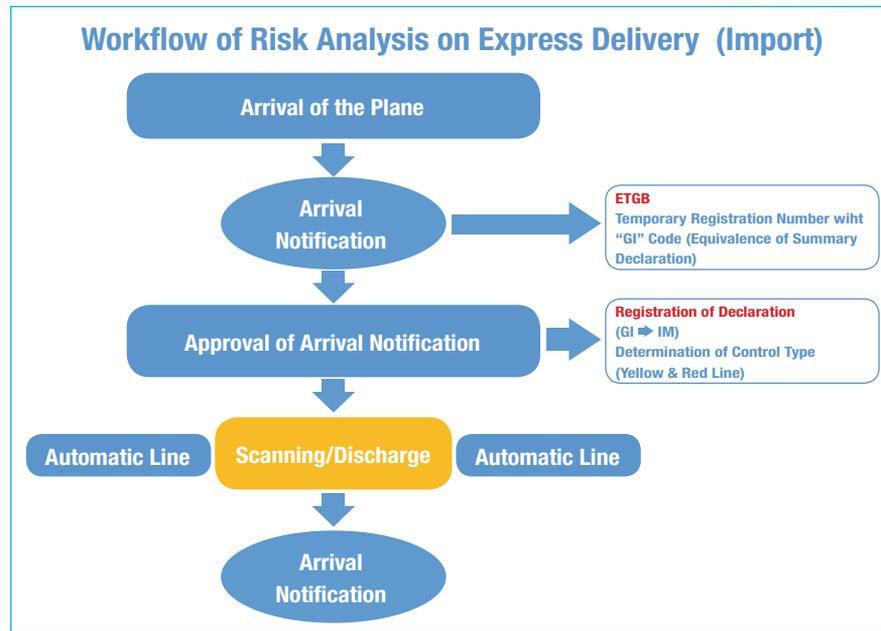


Figure 16: Fast Shipping Risk Analysis Workflow

The inspection line is determined by the registration of ETGB and controls are carried out in accordance with the lines. There are four main screens in the ETGB module.

The main one is the screen where there are general information about the indirect representative company and location of the goods. Information such as type of declaration of ETGB, type of transportation, unloading place is also displayed on this screen.

Transport Bill Screen is the section on where all the transportation bills in ETGB are listed. The transportation bills seen in yellow color means, the transportation bills are processed in yellow lines. Likewise, the transportation bills seen in red color means, the transportation bills are processed in red line.

The third one is the screen on where general information such as trade description, statistical value, country of origin can be seen.

Transport Bills/General Information Screen is on where weight, volume, sender, receiver and country code information about the goods can be checked.

Transport Bills/Inspection Process Screen is the section on where inspection officer information and inspection line information can be seen by the system related to the ETGB. Check results for red line inspection are also displayed on this screen.



3.4.6. Land Border Gates Module

3.4.6.1. Legislation of Land Border Risk Analysis

According to article 34 of the Turkish Customs Code; vehicles entering or exiting the Turkish customs zone are subject to surveillance, customs authorities carry out controls on these vehicles in accordance with legal provisions. To eliminate security and safety risks, risk analysis performances have been carried out by Turkish Customs Administration at both central and local levels.

3.4.6.2. Scheme of Land Border Risk Analysis

To entirely comprehend how the risk analysis process works at land borders, having a good grasp of flow of the customs procedures at land borders is crucial.

First step: Entrance to Customs Territory

After the passport controls done by the police, vehicle license plate is recorded to Land Border Gate Program automatically or in some cases by customs officers. This record meant vehicle has entered to customs area but has not finished customs procedures yet. After the record, all risk profiles and intelligence activities begin working on vehicle license plate.

Second Step: Registration Procedures

During this process, whether vehicles are commercial vehicles or not and regardless of nationality of passengers, they are registered to relevant programs. All the record that are entered to these programs are automatically transferred to Land Border Gate Program where local risk analysis is carried out and central risk profiles have been working on.

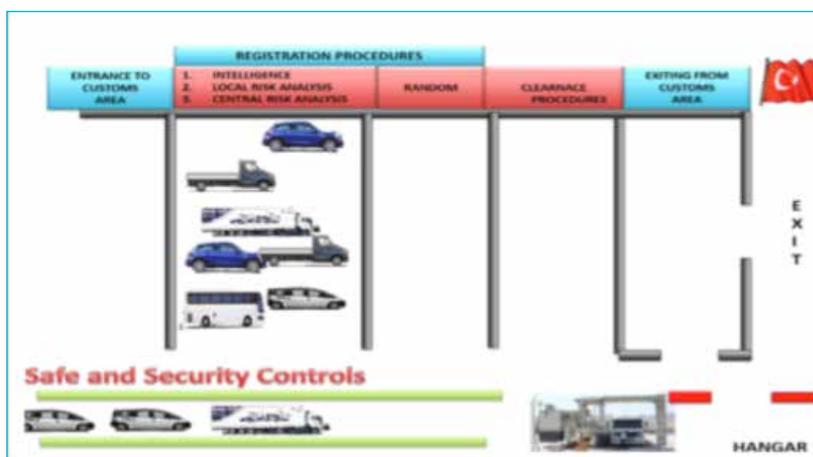
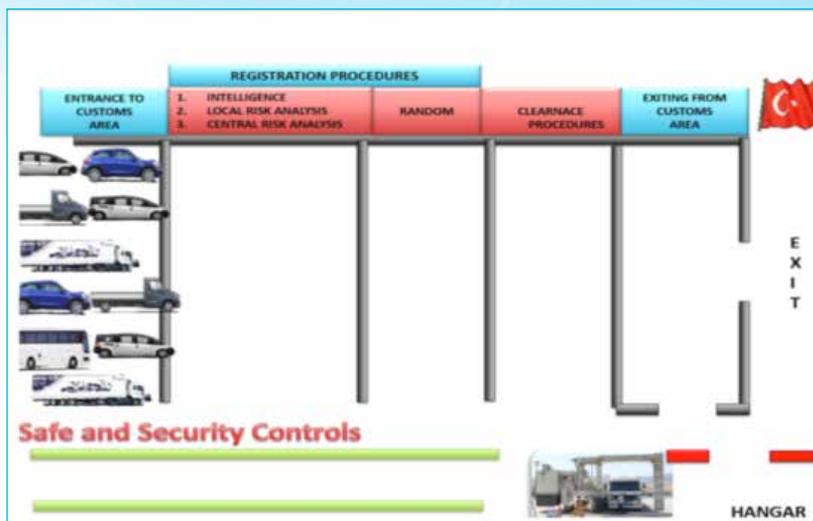
During the registration process, intelligence activities carried out firstly. Then, system checks whether there are any risk profiles matching with the record. Thirdly, system seeks for if there is any local risk targeting relevant to the record. Finally, “random targeting system” works on the record. After all, if the vehicle has not matched with any targeting mentioned, it is free to go on for clearance procedures. On the other hand, if the vehicle matches with any of the targeting, it cannot move on further processes, and customs enforcement officers carry out the necessary control activities. These activities might be either physical controls or X-ray controls, or both depending on the case.

Third Step: Clearance Procedures

During this process, clearance officers fulfill controls regarding procedures. If they detect any safety or security risk, they might send to vehicle to physical control or X-ray control.

Last Step: Exiting Customs Territory

After all the controls and procedures performed, vehicles are able to exit





from customs area following record of exit. In the event of any seizure/interception during the controls, vehicle in question is precluded by customs authority for judicial procedures.

3.4.6.3. Risk Analysis on Land Border Gates Module

Risk analysis on “Land Border Gate” has been carried out both on central level and local level. Just like the other modules, central risk analysis on land border module is enabled by creating risk profiles through Risk Analysis Program. Although, there are nearly a hundred risk indicators for this module, some of them are listed below:

- Information about driver (age, date of birth, nationality etc.)
- Information about transporter, consignee and consigner
- Previous transactions of the vehicle used.
- Incidents recorded in the Anti-Smuggling Databank.

As of 01.10.2018, number of active risk profiles for this module is over 50. All of these profiles are reviewed in every six months and updated if deemed necessary. During these reviewing processes, global trends are considered to further enhance analytical capacity.

Unlike central level, local risk analysis units are not authorized to create risk profiles for land border controls. Local land border risk analysis is performed through land border gate program where instant entrance and exit transactions are recorded.

As explained below, land border gates program consists of data gathered from various vehicle programs. These programs boosts local risk units in the activities of:

- Instant targeting
- Analysis of the past transactions
- Getting statistics

4. FUNDAMENTAL TOOLS, SOFTWARE AND DATABASES DEPLOYED IN RM SYSTEM

4.1. Risk Analysis Program (RAP)

Risk Analysis Program is the main tool for building, updating, expanding and terminating risk profiles and employed both by Department of Risk Analysis at headquarters and regional directorates. The program is accessible through BİLGE.

Former version of the program was introduced in 1999. In 2008, it is re-coded and redesigned, to enhance features like feedback and simulation and statistics mechanisms. Besides, new version has a more friendly and easy to use interface for users. Every authorized personnel accessing RAP has their own password and username.

Risk Analysis Program can be reached from the BİLGE by only risk officers of central risk analysis department and local risk analysis units. In fact, risk analysis works and functions are sensitive in nature, so, access to risk-related information is both physically and electronically restricted. Risk Analysis Program is directly integrated with the modules of BİLGE and some of those are such as:

- Detailed (Full) declaration module
- Summary declaration module
- Land Border Gates module
- NCTS module
- TIR Carnet Tracking Program
- Express delivery module

Risk Analysis Program has 6 different functions;

- Profiling activities,
- Grouping activities,
- Feedback mechanism,
- Statistics and reporting function,
- Simulation,
- Authorization of access.



4.1.1. Profiling Activities

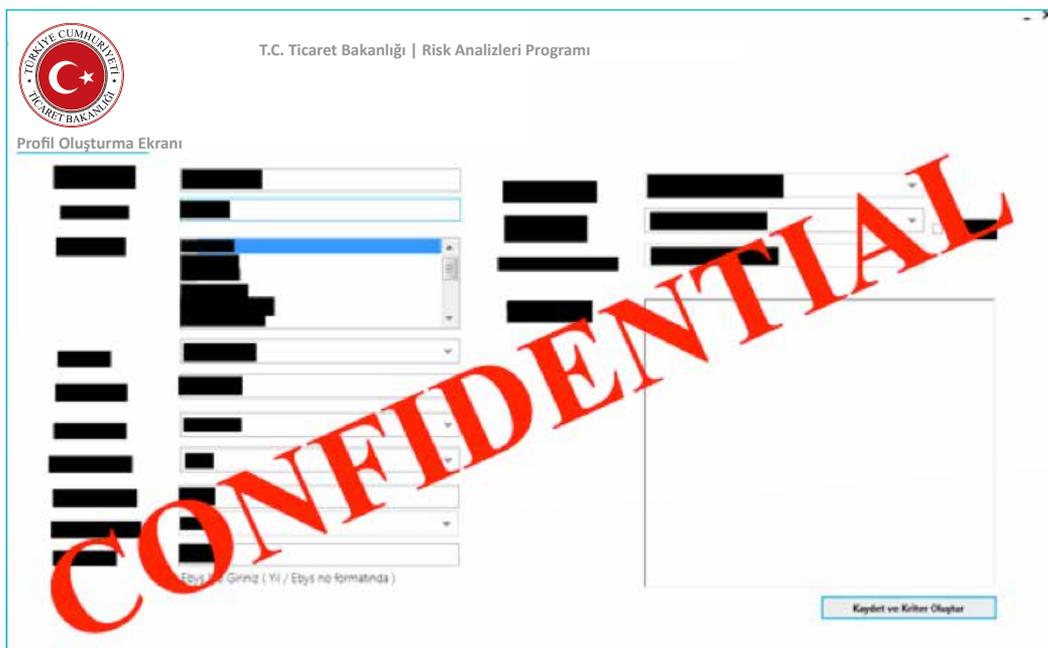
As a result of risk analysis conducted, risk profiles or rules are built on the system. Profiles or rules should fulfill three following functions: Highlighting the risk area, estimating the degree and duration of risk, determine which type of control activities to be carried out.

On this profiling section, users can build, update and terminate risk profiles. In addition, users can inquire the profiles by date, user ID, module etc.



4.1.1.1. Creating Risk Profiles

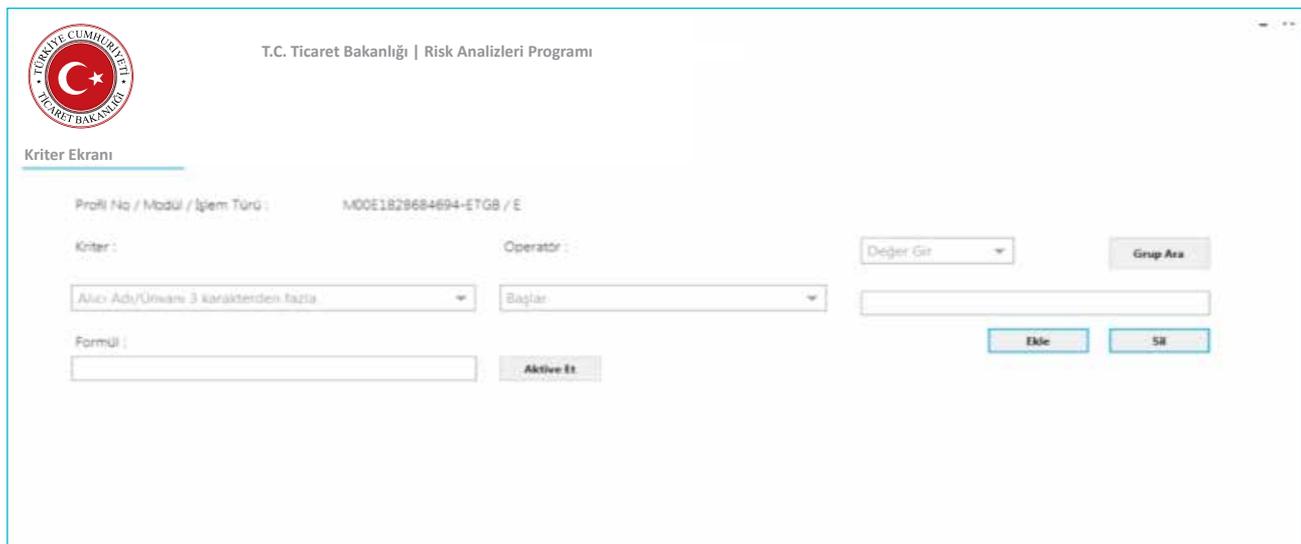
Risk profiles consist of two main parts. First part includes general information of profile such as description of profile, ratio of profile, modules that the profile will be running on, activation and termination dates of the profile, alerts.



The second part includes selection of criteria and the formulation of the profile. In order to create a risk profile, users should follow these steps:

- Determining the appropriate criteria
- Selecting logical operators (Equal, In, Or, Like etc.) to specify logical relations among the criteria.
- Entering the parameter or the group of parameters
- Determining the prioritization of the profile
- Organizing profile formulation
- Activating the profile

On the other hand, while building a new profile, it is also possible to add notifications informing inspection officers on the possible irregularities or non-compliance.



T.C. Ticaret Bakanlığı | Risk Analizleri Programı

Kriter Ekranı

Profil No / Modül / İşlem Türü : M00E1B29694694-ETGB / E

Kriter : Alıcı Adı/Ünvanı 3 karakterden fazla

Operatör : Başlar

Değer Gir

Grup Ara

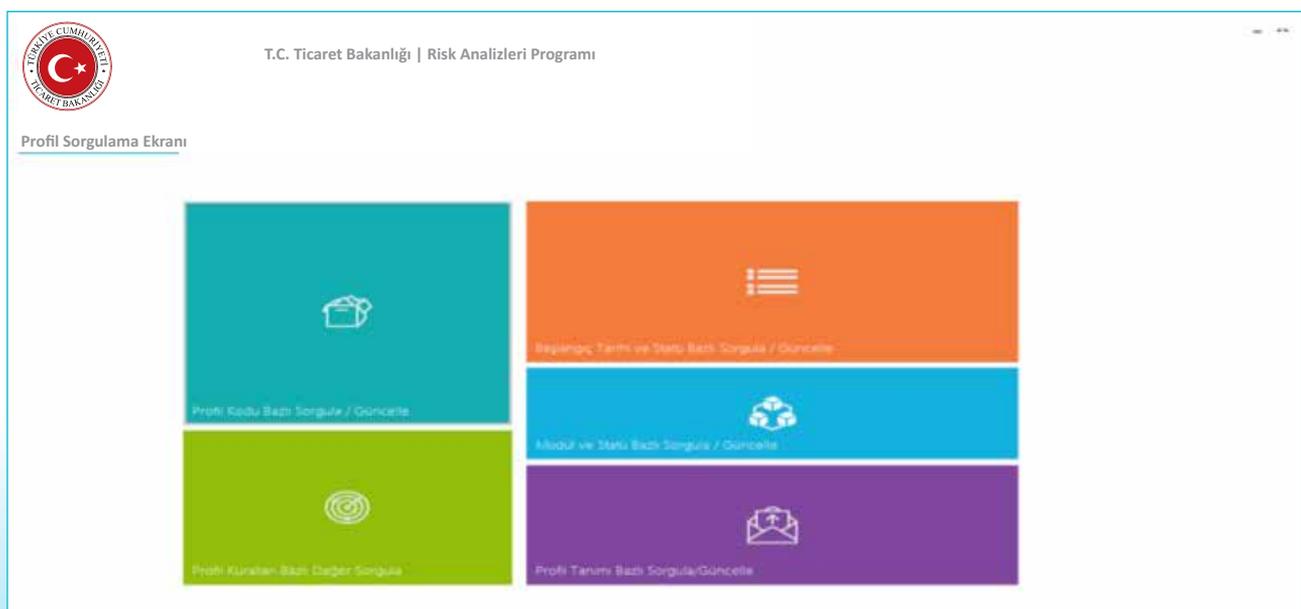
Formül :

Ekle Sil

Aktive Et

4.1.1.2. Searching Risk Profiles

Users can search existing active-passive profiles, by the code of profiles, description, and date of creation, module and criterion.



T.C. Ticaret Bakanlığı | Risk Analizleri Programı

Profil Sorgulama Ekranı

Profil Kodu Bazlı Sorgula / Güncelle

Başlangıç Tarihi ve Statü Bazlı Sorgula / Güncelle

Modül ve İşlem Bazlı Sorgula / Güncelle

Profil Durumu Bazlı Değer Sorgula

Profil Tanımı Bazlı Sorgula/Güncelle

4.1.2. Grouping Activities

What is grouping?

One of the core properties of risk profiles is the “identification” of the risk, which could only be a “single element” like a HS code, an importer etc. or a list containing hundreds even thousands of elements for some instances of risk analysis. In such cases, these elements are pooled into a single profile as groups to facilitate building and reviewing a profile.

Grouping activities help users to;

- Search a subject whether it is already registered or not
- Create a new registry for long lists of values
- Entering new values to a group as new record
- Finalizing the record of a group



4.1.3. Feedback

Monitoring the results of customs control is of utmost importance, because without this mechanism, inefficient or out-dated profiles become a burden on traders. We should always seek ways for allocating limited resources and time towards the actual risks by reviewing all of the profiles periodically to make sure profiles remain effective and work as intended.

Things to be considered while reviewing the profiles:

- How frequent are irregularities detected resulting from profiles?
- Is there any incident recorded to anti-smuggling data bank related to the profile?
- What the analysis of these detection rates shows us?
- What are the overall feedbacks of clearance/inspection officers on the control activity?
- What are the feedbacks of investigators on the matter?
- Are there any complaints from respected traders of relevant sector and operators?
- Is the chosen control rate in line with the detection rate of the risk?
- Are there any out of date/ irrelevant / risk criteria such as a former taxation element in the formulation to be weeded out?

- Are there any interference or prioritisation issues with the profile?
- Is there any element in the formulation of the profile to be fine-tuned?

Reviewing and analysing capacity of central risk department has been strengthened in the recent years thanks to renewal of the programs and time devoted on the mechanism.

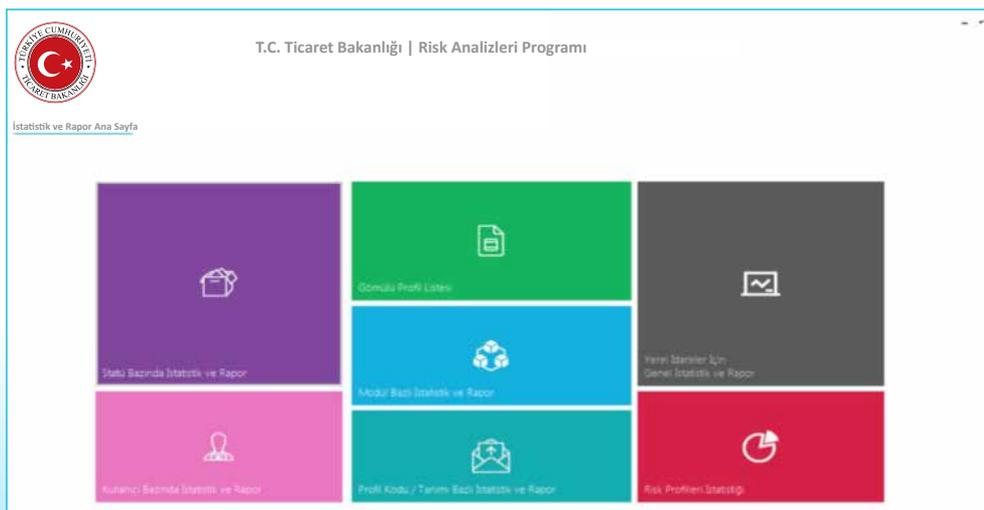
This feedback module of RAP constitutes a part of the feedback and evaluation mechanism as complementary tool by enabling users to evaluate the performance of risk profiles by searching related smuggling incidents and declaration/transaction feedbacks about incidents. As it is mentioned below, all the smuggling incidents are registered to anti-smuggling databank with a summary of the case, date of occurrence, seized goods, ID of the declarations etc.



4.1.4. Statistics

By using this module, users gather important statistical information about risk analysis such as;

- Number of risk profiles created by users
- Number of risk profiles created by central/local units
- Number of risk profiles by related modules
- Number of active or passive risk profiles



4.1.5. Simulation/Testing

Simulation/ Testing module is used for testing a risk profile to check if it is working properly as it is intended to without any technical errors. The module also helps users to analyse why a declaration was / was not revealed by the risk profile, which is also crucial for reviewing mechanism. On the module, some fictive declarations with exactly matching the criteria and all other parameters of the risk profile are created on BILGE test module and system is monitored to see if it actually targets declarations with correct detection ratios.

The time and effort devoted on the simulation mechanism are increased in the recent years. The frequency of unexpected technical errors or encountering unforeseen sequences has been limited largely in the recent years.

To be able to notice these kind of problems instantaneously is the ground we have preferred to employ a simulation mechanism prior to activating a profile especially for the profiles having more detailed and complex formulation.



T.C. Ticaret Bakanlığı | Risk Analizleri Programı

Modül Bazında İstatistik Ekranı

Modül: Hızlı Kargo

Sorgula

Beyanname No:

Profil No:

4.1.6. Authorization

In order to access Risk Analysis Program users has to be authorized. All personnel of central risk analysis department can build risk profiles on all the modules. On the other hand, the authorization of local risk analysis personnels is limited with the related Regional Directorates, and they can create risk profiles only on the detailed (full) declaration module. However, it is possible to authorize the personnel of local risk analysis units to create profiles on all other modules.



T.C. Ticaret Bakanlığı | Risk Analizleri Programı

Yetkilendirme Ana Sayfa

Modül Yetkilendirme

Operatör Yetkilendirme

Erişim Yetkilendirme

Grup Yetkilendirme

4.2. Computerized Customs Transactions Program (BILGE)

4.2.1. Definition and Usage

Automated systems in Customs are one of the most important tools for simplifying international trade procedures. Automated Customs procedures replace the manual processing of Customs documents by the computer-assisted treatment of electronically transmitted information. The use of automated customs systems facilitates trade through the normalization of forms and documents, data standardization, simplification and computerization of customs clearance procedures to accelerate the clearance of goods. It also strengthens customs operational capacity for control by implementing sound procedures and providing full audit trails and mechanisms. Automated customs systems provide governments with accurate and timely statistics on foreign trade and revenue. (UNCTAD, 2011)

General benefits of employing electronic systems in customs:

- Better targeted physical examination of shipments thanks to strengthened risk management
- Higher productivity to customs staffs by enabling to process more
- Faster electronic transaction times
- Reduced customs clearance times
- Reduce delays and costs to traders
- Improved compliance
- Less fraud potential and Increase in public security
- Easier information sharing between entities

In this regard, BILGE (Computerized Customs Transactions Program) has been introduced for TCA in 1998 to replace the manual processing of Customs documents. It has been renewed recently to adopt modern automation needs and to reflect legal changes.

All customs transactions are performed electronically in the BILGE system. Users of the BILGE are both traders and customs officers. Users can reach system via web services or data entrance rooms, which are placed in local customs offices. Traders use system with user name and password. User name and password are issued by local customs offices.

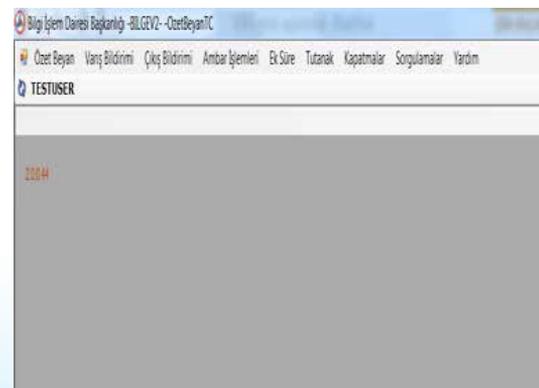


4.2.2. Modules of BILGE

4.2.2.1. Summary Declaration Module

For the import transactions;

User submits summary declaration before vehicles arrive at customs office. When vehicle arrives, trader submits "arrival notification". With validation of arrival notification, summary declaration can be linked with the declaration. Warehouse transactions are also held using this module.

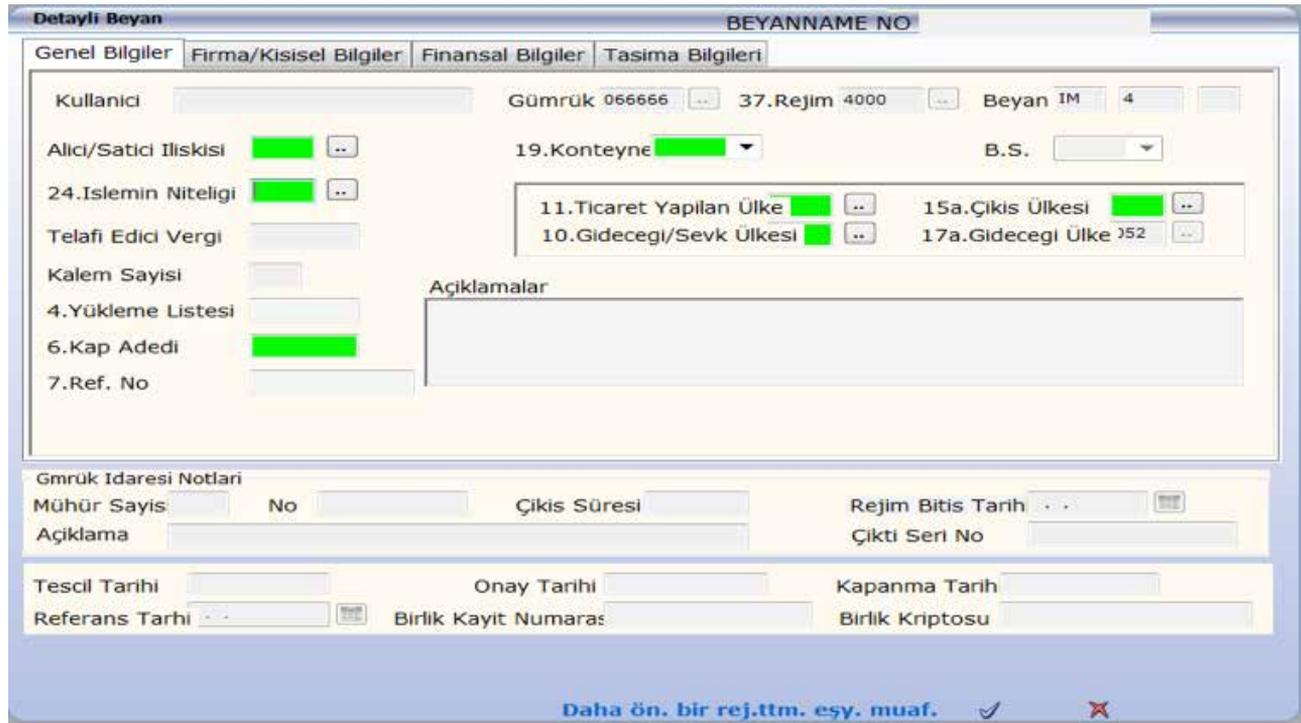


For the export transactions;

Before exiting Turkish Customs Territory, exit validation has to be prepared. This validation will be related with export declaration at future process.

4.2.2.2. Customs Declaration Module

Customs declarations are lodged using this module. Acceptance and control procedures of the declaration are done by using this module. In addition; at this module, risk analysis result and customs officer are determined automatically after the acceptance.



4.2.2.3. Accounting Module

Accounting transactions-paying taxes and other duties- are carried out in the system via this module. Taxes are paid by GÜMKART, which is issued only for payment of taxes. At this module, information of payment sent automatically and the declaration process finalized.

4.2.2.4. Vehicles Module

This module combines some import land border transactions together. Such as;

- NCTS transaction
- TIR transactions under TIR Convention
- Paper based TIR transactions
- Foreign vehicles that enter the country with commercial purposes
- Foreign vehicles that enter the country with touristic purposes
- Vehicles of foreigners that live in Turkey.

4.2.2.5. Land Border Module

This module is used for recording the vehicles entering to land border area or exiting from land border area. Land border gate module works together with declaration module and vehicles module.

4.2.2.6. Tariff Module

This module provides support and references to traders about taxes and additional documents for declaration. If there is a difference between actual declaration and system, module warns the clearance officer about the difference.

4.2.2.7 Guarantee Module

Single or global guarantee transactions are done in this module.

4.2.2.8. Queries Module

Users can make following queries about declaration by using this module:

- Relationship between summary declaration – import declaration - arrival notification
- Relationship between exit notification - export declaration
- History of the declaration
- Global guarantee etc.

4.2.2.9. Express Delivery Module

Express Delivery declarations are called as electronical trade customs declarations and they declared via web service.

4.3. Data Warehouse Programs

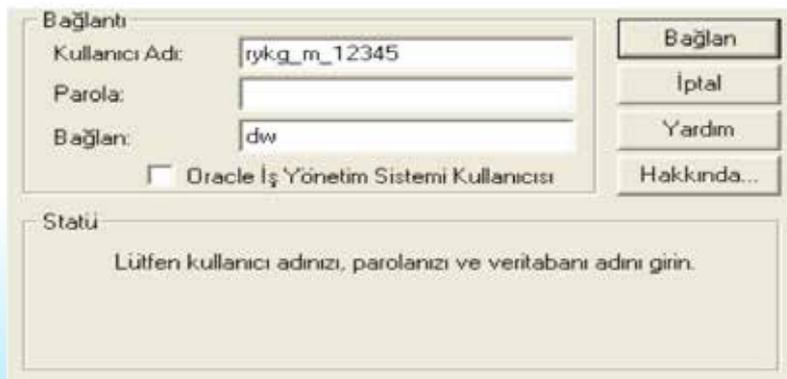
GUVAS, KDS, and Anti-Smuggling Databank programs, which explained below, are employed by TCA to gather data required for risk analysis. On the other hand, Due to fact that the data is getting overwhelmingly large for customs, TCA has been beginning to implement advanced analyze technologies like data mining to handle the “big data” to optimize administration’s performance.

4.3.1. Customs Data Warehouse System (GUVAS)

GUVAS is the databank where data of all the programs used by TCA (BILGE, Anti-Smuggling Databank, Land Border gates Vehicle Pursuit Program, TIR/Transit Tracking etc.) are stored. GUVAS can be identified as an electronic archive of all customs transactions. GUVAS is created for the purpose of archiving the customs data in an efficient and effective way.

4.3.1.1. Access to GUVAS

Users access to GUVAS from Discoverer Desktop or via online customs portal.



The screenshot shows a login window titled "Bağlantı" (Connection). It contains the following fields and buttons:

- Kullanıcı Adı:** rykg_m_12345
- Parola:** (empty field)
- Bağlan:** dw
- Oracle İş Yönetim Sistemi Kullanıcısı
- Bağlan** button
- İptal** button
- Yardım** button
- Hakkında...** button

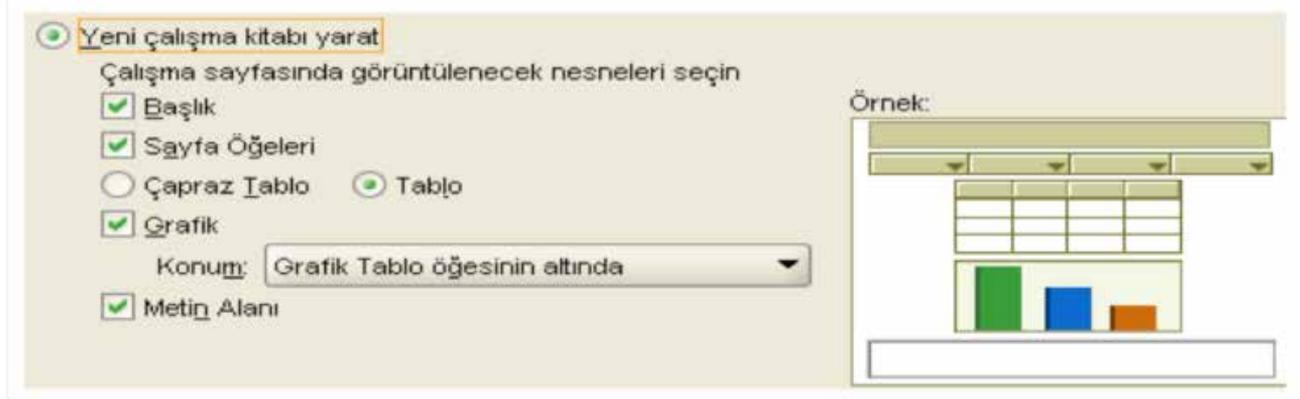
Below the login fields, there is a section titled "Statü" (Status) with the text: "Lütfen kullanıcı adınızı, parolanızı ve veritabanı adını girin." (Please enter your username, password and database name.)

4.3.1.2. Access Data in GUVAS

The data, which will be analyzed, is reached in GUVAS through creating conditional queries.

Determination of the Work Field

It will be decided after the entry to the program how the results or the inquiry shall be tracked by selecting from the opportunities 'table' or 'cross table'.



Work Fields in GUVAS

- Detailed Declaration
- Summary Declaration
- Anti-Smuggling Databank
- Land Border Gates Vehicle Pursuit Program
- TIR Carnet
- Warehouse
- Additional Accruals and Finalized Customs Tax Liability
- Criminal Decisions
- And any other work fields associated with these areas (Risk Analysis etc.)

Items to be analyzed should be selected from the related folders.



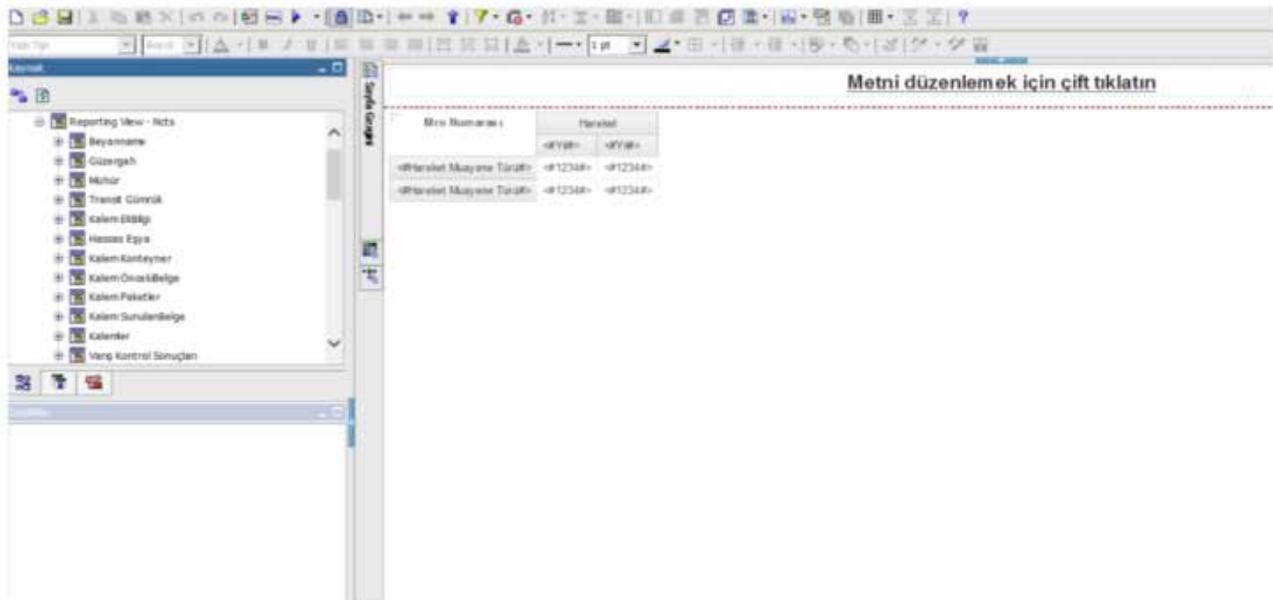
4.3.1.3. Creating Inquiry Conditions

At the tab of 'Conditions' new conditions are defined. In order to determine the work field and data which is needed, it is possible to filter our data, which is no longer necessary or required.

Query is started after the necessary conditions and calculations of selected data are entered. In addition, the result of the query on screen can be sent to an excel document so that further detailed analysis can be carried out.

4.3.2. Decision Support System (KDS)

As result of computerization and IT development, decision support system is started to be used in 2017. KDS is similar to GUVAS; however, it has some advantages over GUVAS regarding data quality, standardisation of data, query speed, accuracy of data and so on. It is planned to replace GUVAS in the near future as it reaches full maturity.



4.4. Anti-Smuggling Databank

4.4.1. Legislation

Turkey has a long experience about anti-smuggling legislation. It has a special penal code for customs crimes and smuggling numbered 5607. Before the 5607 era, Turkey had a very famous and efficient anti-smuggling code numbered 1918 and dated 1932. Later, the understanding of "economic crimes deserve economic punishments" replaced the old version and the code numbered 4926 came into force. Eventually, after the balance between different approaches is established, the 5607 era has began.

Accorindg to the third article of anti-smuggling law, there are nearly 20 smugling categories, such as trying to enter goods without customs procedures, leaving transit goods in Turkish territory contrary to transit regulations, allocating of exempted goods to non-authorized persons or entities, infringing of state's export promotion, and so on. All of those categories, types and techniques are collected and stores in a big smuggling database that is Anti-Smuggling Databank (KBB).

Anti-Smuggling Databank is associated with the "Turkish Anti-Smuggling Law"; gathered information on suspects / people and firms involved in the acts contrary to this law and all the goods, real/legal persons and vehicles subjected to smuggling incidents have been registered into the Program.



4.2.2. General Information

Anti-Smuggling Databank has been established and in use since 01.01.1994. However, flow of information was indirect until 01.06.2005; local authorities were gathering information related to smuggling incidents and sending this information by a written form to DG of Customs Enforcement to record them to the program. Since 01.06.2005, the program came into service for local authorities so the information acquired about the incidents and operations have begun to be entered into records directly by them.

4.4.3. Sources of Anti-Smuggling Databank

National sources:

- Interceptions performed both by local and central authorities of the Ministry,
- Reports of investigation by Department of Guidance and Investigation,
- Interceptions by the departments of Ministry of the Interior,
- DG of Security Affairs,
- General Command of Gendarmerie.

International sources:

- The German Customs Investigation Bureau (Zollkriminalamt, ZKA) notifications,
- Southeast European Law Enforcement Center (SELEC) notifications.

4.4.4. Importance of Anti-Smuggling Databank

Anti-Smuggling databank has many functions Risk Analysis Department benefits from. It basically feeds the big data of risk department and feedback mechanism of it, since the input, output and the correlation between those are crucial in today's IT world.

Main features and contributions are as follows:

- One of the main databank for risk analysis.
- Used for risk analysis feedback.
- Questionings of natural/legal persons and the vehicles and vessels reported on anti-smuggling hotline are carried out.
- Statistical and evaluative reports are produced.
- Questionings of natural/legal persons conducting business at customs zones and permissions for about vehicles are carried out.
- Statistical reports are arranged so as to submit Turkish Statistical Institute (TÜİK).
- All the info recorded in the Program are transferred to GUVAS and KDS databanks to be analyzed and for producing statistics.

4.4.5. Modules/Pages of Anti-Smuggling Databank

Homepage

At the home screen, smuggling incident notification form, record searching, smuggling incident monitoring, inquiry for "custom area entrance card", judicial inquiry, general inquiry, archive report form functions are accessible.

General Info Screen

General info is the section where information on the incident are screened in brief. According to type of the record (national/ international/ criminal investigation), data boxes to be filled differs.

The Suspects / Perpetrators Screen

At the Suspects / Perpetrators Screen, detailed information on people involved in the smuggling acts, like their identities, nationalities, occupation and education level, is recorded.

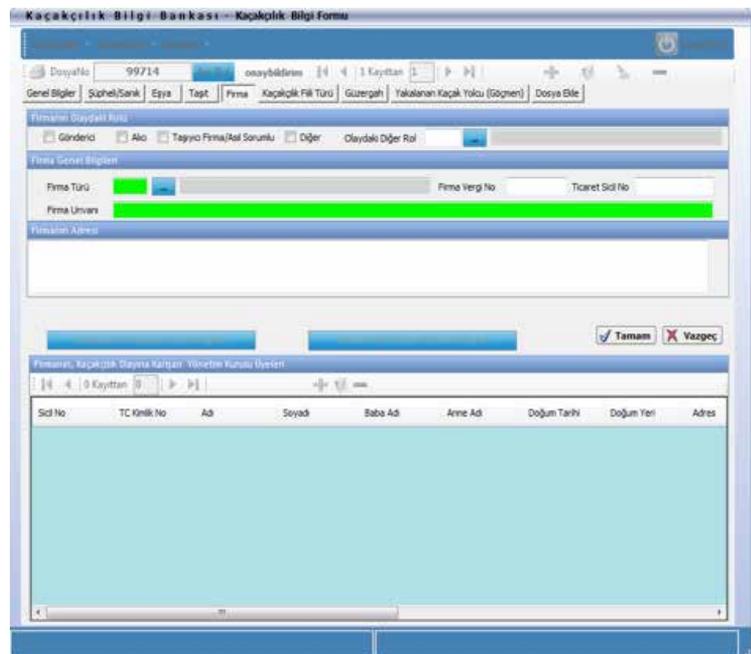
Vehicles Screen

This screen consists of these elements: land vehicles, maritime vessels, containers and trains. Detailed information concerning the vehicles indulged into smuggling incidents has been registered into this screen.

Firms/Entities Section

Details concerning consignor, consignee, shipper that involved in smuggling acts have been registered into this screen.

If the legal person has a tax registration in Turkey, using tax registration number, commercial title, registry credentials and address info are automatically filled by connecting related databases.



Type of Violation Act Screen

Type of the act used in smuggling (illegal acts listed in the corresponding articles of anti-smuggling law and other related laws) is entered into this screen.

Route Screen

On this screen, from departure to arrival, the route of the vehicle and vessels involved in the illegal act, have been entered.

Immigration Screen

Into this screen, nationalities and other information of illegal aliens trying to enter the country are registered.

Attached File Screen

Into this screen; pictures, videos or other files related to the smuggling incidents are saved. This section is mandatory for interceptions of drug/drug production materials.

4.4.6. Creating Queries at the Anti-Smuggling Databank

Users can access to the Anti-Smuggling Databank via both BILGE and GUVAS for creating queries. There are important differences between two queries: Users cannot combine different modules if they create their query through BILGE. They can only choose one module to create query. For example, they can only use firms section but cannot combine it with the vehicle section. On the other hand, GUVAS allows the users to make combinations for queries.

4.5. Land Border Gates Program

Land Border Gates Program consists of the data gathered from NCTS program, TIR Carnet Program and other vehicles programs. It was developed by DG of Customs Enforcement, and has been used by personnel of Local Risk Units and Anti-Smuggling intelligence branches.

The program has standard query and detailed query functions. It allows combined searches by using multiple info boxes such as destination, commercial description of the goods being carried and birth year of the driver.



The result of the query gives users information about past transactions of the vehicle license plate such as:

- Information of driver: name, surname, birthday, nationality etc.
- Information of transporter: Name, license plate, nationality
- Entrance and exiting dates
- Carried Goods: description
- Declaration number
- Way of the transaction: exit or entrance

It is possible to analyze chosen vehicle's previous transactions by double clicking on it. Double clicking forwards users to second screen: the fast query page.

At fast query screen, users can make queries only upon vehicle license plate. Despite the first page, at this page users cannot make combined searches.

Risk Analizi Şube Müdürlükleri

Gümrük KAPIKULE GÜMRÜK MÜDÜRLÜĞÜ

Plaka [REDACTED] Güm [REDACTED] Sorgula (Ent) Temizle () 1 / 136

Plaka [REDACTED] Türü [REDACTED]

Dorse No 1 [REDACTED]

Dorse No 2 [REDACTED] XRAY Yok

Yönü Türkiye'ye Giriş Varış Günü [REDACTED]

Saha Takip (F5) Saha Özet (F6)

2018 09 27 00:00 P1S

YER KAYIT ÇIKIŞ ONAYI YK

Açıklama

Kayıt Detay	Gümrük	Plaka	Dorse No1	Dorse No2	T.Türü	Yönü	Giriş Tarihi
Kayıt Detay	KAPKULE G...	[REDACTED]				Türkiye'ye Giriş	26.09.2018 ...
Kayıt Detay	KAPKULE G...	[REDACTED]			MINIBUS	Yurt Dışına Çıkış	22.09.2018 ...
Kayıt Detay	KAPKULE G...	[REDACTED]			MINIBUS	Türkiye'ye Giriş	22.09.2018 ...
Kayıt Detay	KAPKULE G...	[REDACTED]			MINIBUS	Yurt Dışına Çıkış	12.09.2018 ...
Kayıt Detay	KAPKULE G...	[REDACTED]			MINIBUS	Türkiye'ye Giriş	12.09.2018 ...
Kayıt Detay	KAPKULE G...	[REDACTED]			MINIBUS	Yurt Dışına Çıkış	05.09.2018 ...
Kayıt Detay	KADIKÖY F.G.	[REDACTED]			MINIBUS	Türkiye'ye Giriş	05.09.2018 ...

In the event of any safety and security risk is revealed during the analysis, the vehicle is directed to x-ray controls.

If deemed necessary, users can also send a notification message to warn operators about the reason on why vehicle have been sent to x-ray control. These messages can only be read by x-ray operators.

Furthermore, Land Border Gates Program has another page, "customs zone analysis page", which is used for analyzing the vehicles that already are at the zone.

5. DATA MINING: INTEGRATED METHOD OF EVALUATING RISKS HIDDEN IN BIG DATA

Day by day, the amount of data being generated and stored is growing exponentially. This presents many opportunities for those who can obtain the information embedded within this data. It can be said that all these challenges carried us to the concepts of big data and data mining.

Big data entails huge datasets which are considered “too big” to complete the necessary work within an acceptable waiting time by relying on traditional data management and processing models (Okazaki, 2017).

Big data, a general term for the massive amount of digital data being collected from all sorts of sources, is too large, raw, or unstructured for analysis through conventional relational database techniques (Chung et al., 2014).



In parallel with these explanations, big data analytics refers to analyzing large volumes or some components of this big data according to research aims and methodology. When it comes to the target of big data analytics, it aims to uncover hidden parts or patterns of big data, which might be invisible, besides, to bring about some insight for whom made it.

From the pros and cons perspective, big data introduces a number of advantages although it has a few disadvantages. It helps the user (i.e. customs officers/inspectors) to notice patterns indicating fraud, to take necessary actions with the help of reporting structure. It avails machine-learning techniques that teach (not program) machines leading to creating automated models. It makes predictive modelling and decision-making possible which enables to analyze a large number of indicators before problems or difficulties come to live. It also brings operational efficiency and drive innovative way of thinking at every fields that are used.

What could be the challenges? First, big data is ontologically huge which might be unmanageable or uncontrollable if proper measures are not taken. The storage is a big difficulty to manage, while cloud technologies nowadays come to help. Last, big data is changing so rapidly that it is almost impossible to keep pace with these changes.

Big data requires certain capabilities including tools for analytics. In this regard, it can be said that data mining tools provide to help finding patterns, trends and potential indicators from big data.

Data mining is far more powerful than the analytics that were used in the past. With data mining techniques, it is possible to measure effectively and therefore manage more precisely than ever before. Thus, better predictions can be made and more-effective interventions can be targeted.

5.1. The Concept of Data Mining and Its Role in Identifying Risks at Customs

Customs Administrations have been substantially affected by the changes of global trade and increase in foreign economic and commercial relations. In conjunction with the increase in foreign economic and commercial relations, the rise and diversity in the illegal movement of goods, vehicles and human beings have also been observed.

The increase in the legal and illegal transactions has forced the customs authorities and all the administrations facing such transactions to improve their capabilities.

Nowadays in Customs Administrations' data not only come from declarations, but also the results of inspections and from other administrations' data.

The information obtained from these various sources makes up the customs information system, which, among other things, allows a risk management system to be constructed and declarations to be directed to the different customs clearance channels (Laporte, 2011).

Therefore, the fact that these data are growing day by day requires modern and statistical techniques in order to carry out risk analysis systems more effectively.

Data mining is a technique about finding insights, which are statistically reliable, unknown previously and actionable from data. Data mining uses sophisticated mathematical algorithms to segment the data and to predict the likelihood of future events based on past events (Oracle, 2008).

Data Mining is:

- Discovering patterns, trends and relationships represented in data
- Developing models to understand and describe characteristics and activity based on these patterns
- Using insights to help evaluate future options and take fact-based decisions
- Deploying scores and results for timely, appropriate action

* This box is created from the presentation of Mathias Lanner about Data Mining.

Actually, data mining could be predictive and descriptive. Descriptive methods such as clustering and association rule mining extract the general characteristics of the dataset. Predictive methods such as regression make predictions using the existing datasets.

Data mining is an influential tool and it uses modern techniques, such as advanced statistical models, visualization, pattern recognition, fuzzy logic, algorithms and machine learning.

Of course, in order for all of these techniques to be successful, the business unit needs to include the necessary information in this process.

As it mentioned before, data mining allows the discovery of knowledge potentially useful and unknown. Whether the knowledge discovered is new, useful or interesting, is very subjective and depends upon the application and the user (Zaiane, 1999).

That is why, the experience and knowledge of the user (business unit) is vital in this process.

In the literature, there are various articles written about fraud detection with data mining. In these articles, different methods for the detection of fraud were proposed and examined. Various approaches can be adopted in data mining studies and of course, the customs data set has a great importance in the selection of these approaches.

For example, in Shao et al. (2002)'s paper due to the complex customs data, multidimension criterion data model was used. Four phases were defined in this study. Figure 15 shows the schema of the customs data mining process in Shao et al. (2002)'s paper.

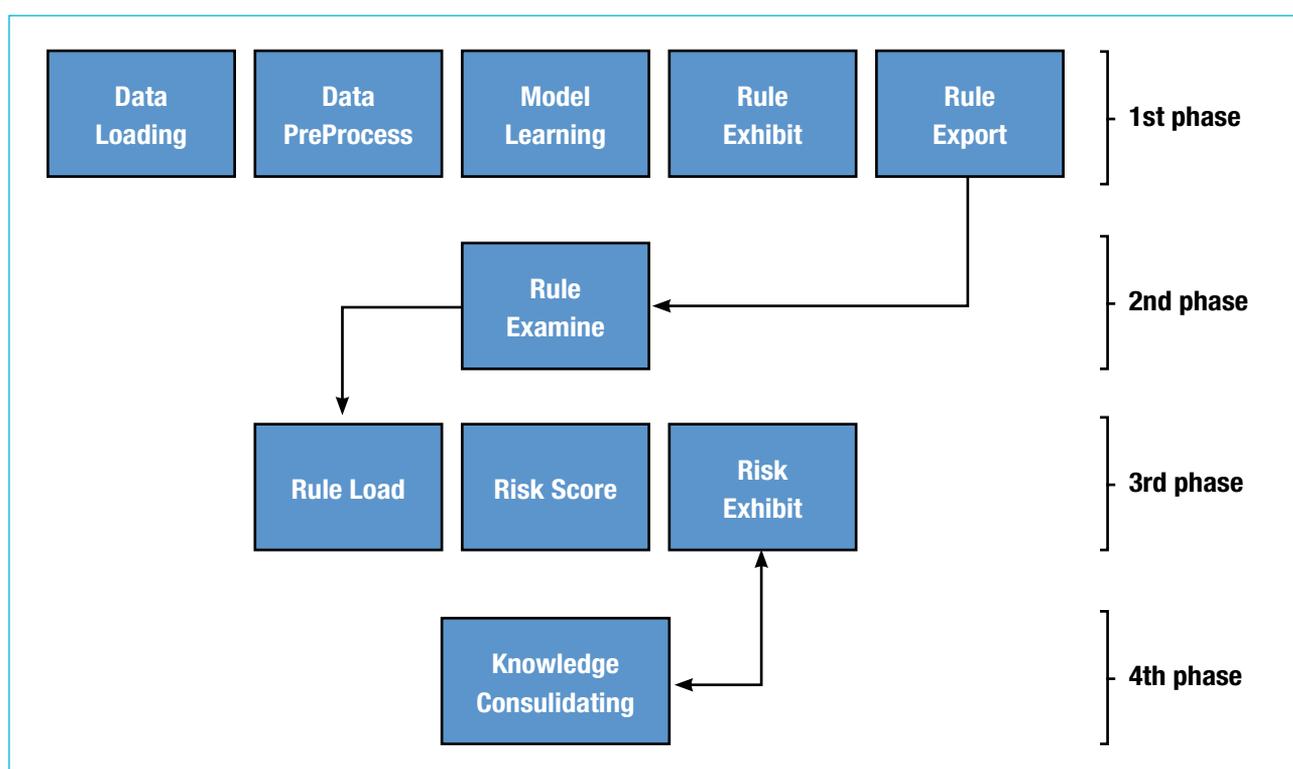


Figure 17: Data mining process at customs

For customs, time series analysis, predictive modelling and anomaly detection are some of the most applied data mining techniques in the literature.

With time series analysis, which is one of the applicable data mining technique, Customs Administrations can look for patterns. Explaining a significant increase of trade for a certain product from a certain country of origin makes it possible that new risks will be found.

Predictive modelling has a great importance on all data mining process. In data mining studies, regressions and decision trees are mostly used in predictive modelling. These approaches are also suitable for making new profiles or for improving existing profiles.

Another example of these techniques is anomaly detection, which can be also defined as an outlier detection. With anomaly detection, for example, it can be possible to detect declarations, which deviate from the estimated price.



Figure 18: Example of Anomaly Detection

According to WCO, data mining techniques help Customs Administrations to perform better in risk identification, analyzing and preparing for checks. With data mining, Customs Administrations can gain time and can perform fewer checks with the same or even better results.

5.2. Data Mining Project at TCA

TCA has been seeking to strengthen its risk management and analysis system, which was established in 2008 with a view to making its customs control operations at sea ports, airports, land borders and inland more effective.

TCA evaluates the procedures based on risk analysis with selective methods ensuring that it simplifies legal trade and prevents illicit trade. While it simplifies the procedures for legal and natural persons, who trade legally, it has employed vigorous effective counter measures to combat organized crime.

With the Data Mining Project, it will be provided to analyze the big data of TCA with the most efficient and modern methods. The project covers the years of 2018 and 2019.



There will be fundamental contributions of Data Mining Project to TCA's risk analysis system. The whole Project was planned in line with these contributions. The expected contributions are as below.

- Simultaneous access to data from different sources
- Ensuring the effective use of risk scoring systems
- Increasing selectivity in risk analysis by analyzing high-scale data
- Focusing on more risky areas in real time
- Use of advanced techniques such as modeling and reporting with statistical methods and algorithms in Risk Analysis studies

In accordance with the above expectations, all of the tools in Project were provided under the name of Integrated Data Analytics Solution in August 2018. Thus, the Project has started.

In addition to Data Mining tools, the Project has six more components. These are; Data Quality, Rule Engine, Real Time Analytics, Text Mining, Social Network Analysis and Dashboards, Inquiry and Reporting tools.

What to do within the scope of the project is as follows.

- Take advantage of the international experience and the best country practices (know-how) in the area of risk analysis and integrated data analytics
- The existing risk profiles in the risk analysis system will be analyzed and transferred to the data mining system in a more efficient format



Figure 19: Components of Data Mining Project

- Various risk rules and models which are based on the best country practices and international experience will be added to the risk analysis system
- Text mining will be done in free text fields such as the Anti-Smuggling Knowledge Base Records
- Detection of anomaly in customs procedures will be done
- Current risk profiles will be examined by machine learning method and improvement proposals will be made
- Data quality studies will be carried out on various data sets
- Predictive models will be created
- Using social network analysis methods, the connection of risky entities with all other entities can be revealed in different dimensions

As a result of the project, significant changes are expected in the current risk analysis system. In this regard, Table 5 presents the key features of the current and strengthened risk analysis system.

Current Risk Analysis System	Risk Analysis System Powered by Data Mining
- Rule Based & Static Risk Profiles	- Rule Based, Static and Dynamic Risk Profiles, Analytical Models
- Ratio and Time Based Targeting (General)	- Ratio, Time and Number Based Targeting (Both General and Specific), Real Time Scoring
- Classical Methods & Tools Used in Analysis Processes	- Faster and Analytical Analysis Process than Classical Methods & Tools
- Process of Analysis that Requires Intensive Time and Labor (Data Quality, Data Integration, etc.)	- Effective analysis of Large Scale Data
- Systematic Constraints in Data Analysis and Small Scale Data Analysis	- Advanced Statistical Methods, Machine Learning, Fuzzy Matching, Anomaly Detection, Social Network Analysis, etc.

Table 5: Current Risk Analysis System and Risk Analysis System Powered by Data Mining

As can be seen, many works will be realized within the scope of the Project. In 2019, all these are planned to be completed.

TCA will have a RA system which increases its selectivity rates, utilizes advanced technologies and helps the MoT carry out its main objective “facilitating legal trade preventing illegal trade”.



6. THE RESULTS OF DEPLOYING RM SYSTEM: EXAMPLES OF SIGNIFICANT SEIZURES AND OTHER CONTRIBUTIONS

Having established a modern risk management system in 2008, MoT continues to regularly evaluate and update the system to take account changing trading initiatives and legislation to comply with WCO Standards and EU Customs Blueprints. This system enables compliant traders to have their customs declarations/transactions processed in a timely and appropriate fashion. Whilst focusing on risk based controls, as much as possible on high risk shipments [pre-arrival messages] in advance of arrival in Turkey, which allows MoT to focus on non-compliant traders and support Turkey in becoming one of the significant participants in the world economy.

Turkey has been strengthening the existing risk management and a risk analysis system to build up an efficient customs control operations at seaports, airports, land borders and inland. Turkey's automated risk analysis system categorizes transactions on the basis of high-, medium- and low-risk scores, which takes a trader's compliance history into account, for example its Authorized Economic Operator (AEO) status. The system enables the MoT to carry out risk-based controls, primarily with a view to targeting high-risk shipments on the basis of pre-arrival messages before they arrive in Turkey, thereby facilitating Turkish ambitions for the country to become a major player in the global economy (Toksöz & Duran, 2013).

What are the outcomes of all these efforts and RM System? RM is actually a targeting tool of customs administrations. It helps customs to determine which goods should be checked, at which level, where and when. Thus, RM systems make use of some rules or profiles in order to meet aforementioned situations or questions. The most concrete result of those rules and regulations is customs colorful lines: red, yellow, blue and green. One of the basic reflections of RM is the facilitation of customs transactions and enabling the fast movement of goods. That is why, the speed of customs clearance comes to play a crucial role, which introduces an objective and calculable criteria for those timing. Another very concrete outcome of RM system is seizures of illegal goods like narcotics, weapons, cultural artifacts etc. In fact, even though the analysis part of RM system plays the significant role at the background, seizure statistics play a showcase, which is considered valuable in nowadays world.

6.1. Statistics Regarding Risk Profiles

The risk profiles are used for targeting the shipments for inspection, which are a logical combination of two or more indicator; ranging from relatively simple to highly complex algorithm. An example of a simple profile is commodity code and country code, or consignee and commodity code. More complex rules typically combine several conditions or calculations.

Any declaration is matching at least one of the risk profiles targeted for physical inspection, which is conducted according to recommended control measures. The risk profile may also include messages, which explains the specific risk content.

Currently, TCA is managing approximately 962 active central risk profiles in the Risk Analysis Programme. On the other hand, approximately 842 passive central profiles were applied in the system from 2008 till 2018. In addition, in order to increase the effectiveness of CRM, TCA continuously updates existing rules and defines new rules.

6.2. Rates of Control Channels at TCA

TCA monitors and evaluates the physical inspection rates regularly. The size of the controls is determined by the Risk Assessment and Coordination Board, which meets at the Presidency of Deputy Ministry of Trade. Since the establishment of the Risk Management and Strategic Assessment Unit in 2008, the physical control rates have been reduced every year. In addition, exemplary country practices regarding the size of the controls are also continuously monitored.

In this respect, physical control rates were 35% for import and 13% for export in 2008, a substantial decrease was succeeded in the course of time. For the coming years, the RAD targets physical inspection of less than 14% of import shipments and around 4% of export shipments. More importantly, the RAD tries to increase correction rates showing the effectiveness of profiles or rules. Documentary checks are between 53% and 67% for all shipments (import and export). TCA increases the number of green channel declarations related to AEOs in order to facilitate secure, low-risk trade with minimum disruption to traders, thus increasing cooperation and partnership with non-risky companies.

6.3. Release Times for Customs Clearance

Statistics on release times for customs clearance is published periodically on the Ministry's web site. Release time for export starts with the registration & approval of export declarations and covers the time until the completion of the control and inspection procedures carried out by the customs office.

In 2010, while 70% of export declarations were concluded in the first half hour and 90% in the first four hours, in 2017 98,5% of export declarations were concluded in the first half hour and 99,6% in the first four hours. Transaction times of other ministries or institutions like Ministry of Agriculture, Ministry of Health, Turkish Standardization Institute, and Turkish Atomic Institute are not included in those calculations.

Release time for import starts with the registration & approval of import declarations and covers the time until the completion of the control & inspection procedures followed by the time to pay taxes.

In 2010, while 51% of import declarations were concluded in the first eight hour and 70% in the first twenty-four hours, in 2017 71,4% of import declarations were concluded in the first eight hour and 87,5% in the first twenty four hours. Transaction times of other ministries or institutions like Ministry of Agriculture, Ministry of Health, Turkish Standardization Institute, and Turkish Atomic Institute are not included in those calculations.

6.4. Examples of Significant Seizures

Alongside with the increase of legal foreign economic and trade relations, it has been observed that the volume of illegal goods, vehicles and human trafficking have also increased. Risk analysis for safety and security purposes are executed according to Article 69 of Customs Regulation, all before the goods arrive at Turkey, which benefits from the information contained in the summary declaration. It is essential that smuggling cases and firms convicted of smuggling in the region should be inspected regularly from the Anti-Smuggling Databank in the scope of safety and security risk analysis. In this context, significant drug seizures done by TCA as a result of risk analysis is shown in Table 6.



<i>Item No</i>	<i>Date</i>	<i>Customs</i>	<i>Assigning Unit</i>	<i>Module</i>	<i>Contraband</i>	<i>Quantity</i>
1	29.12.2012	İpsala	DG of RMC	Land Borders	HEROIN	165 kg
2	26.01.2013	Kapıkule Tır	DG of RMC	Land Borders	HEROIN	52 kg
3	01.06.2013	İpsala	Trakya Department of Risk Analysis	Land Borders	HEROIN	15 kg
4	10.06.2013	Kapıkule Tır	DG of RMC	Land Borders	EXTACY	85 kg
5	29.08.2013	Kapıkule Tır	DG of RMC	Land Borders	HEROIN	100 kg
6	02.01.2014	Ambarlı	İstanbul Department of Risk Analysis	Summary Declaration	CIGARETTE	1.300.000 packages
7	21.03.2014	Hamzabeyli	Trakya Department of Risk Analysis	Summary Declaration	EXTACY	29 kg
8	12.05.2014	Mersin	DG of RMC	Detailed Declaration	CIGARETTE	2.317.000 packages
9	29.05.2014	Ambarlı	DG of RMC	Detailed Declaration	CIGARETTE	206.500 packages
10	30.05.2014	Pazarkule	DG of RMC	Land Borders	HEROIN	20,8 kg
11	19.08.2014	Kapıkule Yolcu	DG of RMC	Land Borders	HEROIN	20,8 kg
12	28.08.2014	Hamzabeyli	DG of RMC	Land Borders	HEROIN	24 kg
13	17.10.2014	Kapıkule Tır	DG of RMC	TIR/Transit	HEROIN	52,5 kg
14	18.10.2014	Kapıkule Tır	DG of RMC	TIR/Transit	HEROIN	192,5 kg
15	17.01.2015	Hamzabeyli	Trakya Department of Risk Analysis	Land Borders	HEROIN	19,9 kg
16	22.02.2015	İpsala	Trakya Department of Risk Analysis	Land Borders	EXTACY	18.340 units
17	18.03.2015	Hamzabeyli	Trakya Department of Risk Analysis	Land Borders	HEROIN	122,7 kg
18	29.03.2015	Mersin	DG of RMC	Summary Declaration	SYNTHETIC DRUG	103,3 kg
19	23.10.2015	Gürbulak	Gürbulak Department of Risk Analysis	Land Borders	OPIUM	123,9 kg
20	09.03.2016	Kapıkule	Trakya Department of Risk Analysis	Land Borders	EXTACY	32,9 kg
21	28.03.2016	İpsala	DG of RMC	Land Borders	HEROIN	34,8 kg
22	06.05.2016	İpsala	Trakya Department of Risk Analysis	Land Borders	MARIJUANA	70,2 kg
23	28.12.2016	Kapıkule	DG of RMC	TIR/Transit	MARIJUANA	93,8 kg
24	28.12.2016	AHL Kargo Salonu	İstanbul Department of Risk Analysis	Summary Declaration	ELECTRONIC CIGARETTE	10.561 units
25	08.02.2017	Gürbulak	Gürbulak Department of Risk Analysis	Land Borders	HEROIN	153,5 kg
26	09.02.2017	İpsala	Trakya Department of Risk Analysis	Land Borders	MARIJUANA	298,6 kg
27	16.02.2017	Ambarlı	DG of RMC	Summary Declaration	COCAINE	62 kg
28	22.02.2017	İskenderun	Doğu Akdeniz Department of Risk Analysis	Summary Declaration	AMPHETAMINE	13,4 kg
29	20.03.2017	Ambarlı	İstanbul Department of Risk Analysis	Summary Declaration	CIGARETTE	1.090.000 packages
30	01.05.2017	Hamzabeyli	Trakya Department of Risk Analysis	Land Borders	HEROIN	771 kg
31	03.08.2017	Mersin	DG of RMC	Summary Declaration	COCAINE	122,7 kg
32	05.05.2018	Ambarlı	DG of RMC	Summary Declaration	COCAINE	122,7 kg

Table 6: Significant Seizures

Seizure Examples:

Example 1.

As a result of an entry about a transporter firm on Intelligence and Land Bordergates Programme by Central Risk Analysis Unit, a TIR loaded textile, which is destined to Germany on 11.01.2010 directed to physical check by regional officers.

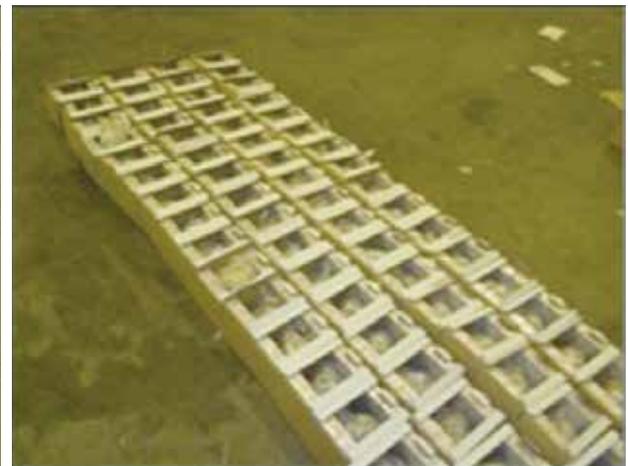
After the control, it was detected that the certificate of the company for TIR transport had been cancelled. **Seized Goods:** X-Ray scan of the lorry showed 430 packages, which were found to contain all in all 228 kg and 396 gr. heroin under the floor of the trailer.



Example 2.

As a result of Risk Analysis Department's profile on high-risk goods, a vehicle departing on 28.08.2012 for the Netherlands directed to physical check at Kapıkule Bordergate. Declared goods is tea, which is under transit regime.

Seized Goods: Inside of the tea boxes, total 261 boxes (135.212 gram) of heroin is seized of which market value is 8 million 270 thousand TL.



Example 3.**Location:** Ambarlı Port**Date:** 02.01.2014

Local Risk Analysis Unit of Istanbul Regional DG directed summary declaration into physical control. Goods are declared as tea tray coming from China.

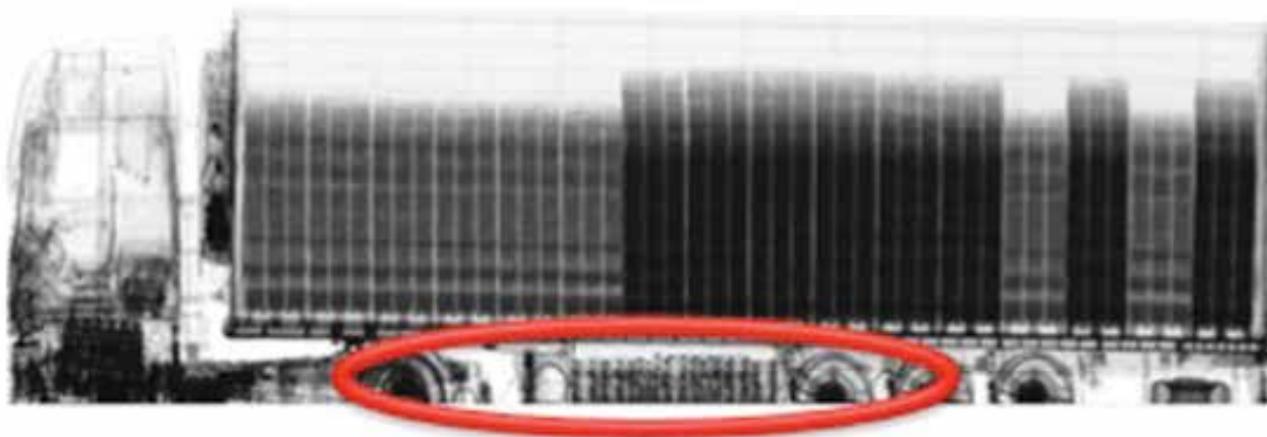
Control Type: Full detection with X-Ray Scan**Seized Goods:** Foreign brand cigarette - customs value of 9 million 630 thousand Turkish Liras (1 million 300 thousand package).**Example 4.****Location:** Edirne - Pazarkule Bordergate**Date:** 30.05.2014

Central Risk Analysis Department directed a private car to physical check on Land Bordergates Programme, which is leaving the country and destined to Albania.

Control Type: Physical check accompanied with detector dog.**Seized Goods:** 20, 76 kg heroin is detected.

Example 5.**Location:** Edirne - Kapıkule Bordergate**Date:** 15.12.2014

Central Risk Analysis Department directed a TIR to physical check on Land Bordergates Programme, which is leaving the country and is destined to Moldova.z

Control Type: X-Ray scanning & physical check accompanied with detector dog.**Seized Goods:** 192.7 kg heroin is detected.**Example 6.****Location:** Edirne – Hamzabeyli Bordergate**Date:** 27.04.2017

Trakya Local Risk Analysis Unit directed a TIR to X-ray scanning on Land Bordergates Programme, which is coming from Iran and destined to Bulgaria. TIR Carnet is directed to physical check with the explanation of “Risk of drug smuggling in freight” as a result of central and local risk profile. Goods are declared as 15 palette of Polyvinyl chloride (PVC).

Seized Goods: Total 775 kg of heroin is seized of which has a market value of 57 million TL. (The Highest Quantity of heroin seized in Turkish Customs at one time)



Example 7.

Location: Mersin Port

Date: 03.08.2017

Summary declaration of a container coming from Equator with legal freight of banana is directed to physical check (Code 2/X-Ray) as a result of central risk analysis profile.

Control Type: Physical check with the explanation of “Risk of drug smuggling in freight”. Goods are declared as 15 palette of Polyvinyl chloride (PVC).

Seized Goods: As a result of X-Ray scanning, density difference in the ceiling part of the container was determined. After container is physically checked with detector dog by Mersin Anti-Smuggling and Intelligence Directorate, cocaine, which has a total weight of 122.685.69 grams seized in 102 packages with a market value of approximately 24.537.000 TL.



Example 8.

The research in GÜVAS revealed that:

- XX Makine San. A.Ş. imports goods with commodity code 7202.99.30.00.00 in routine.
- The company has declared goods, which have commodity code 7202.29.10.00.00 as 7202.99.30.00.00 and was fined before.
- It was detected that the same company had other shipments previously similar to the one fined.

Declared:	Found:
Code: 7202.99.30.00.00	Code: 7202.29.10.00.00
Duty rate: 2,7 %	Duty rate: 5,7 %
VAT: 18 %	VAT: 18 %
	Difference: 400.386TL

Example 9.

A GÜVAS research was done on companies, which have preference paper of Form A or EUR.1, but haven't used it before, and vice versa on companies have used these preference papers without having privilege to use them.

It was researched why these operators do not use the preference papers or declare without having them.

When antidumping duties were introduced against goods (55.08 commodity code) with origin of China, the origin of these goods were declared as Vietnam.

VIETNAM

Satışa sunulan miktar / miktar KG 17.690,40 34x Menge 630

25 Brüt ağırlık KG 18.720,00

38 Net ağırlık KG 17.690,40

41 Tarama miktarı KG 17.690,40

Algemein beina 1

Algemein beina 2

Algemein beina 2

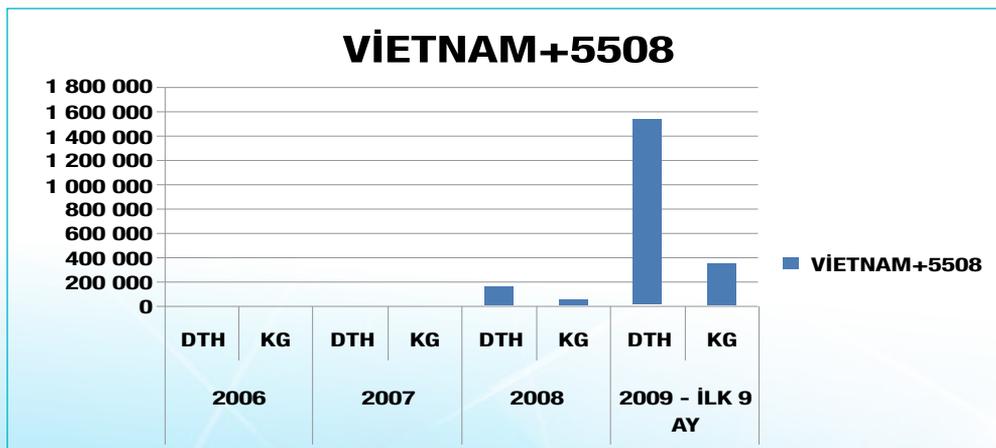
Kapama beina/miktar

Toplam açılan miktar

Toplam kapatılan miktar

GV: %4 GYÜ: 0

GYÜ Muafiyeti Uygulanarak 0 Vergiden yararlanma imkanı olduğu halde %4 Gümrük Vergisi Ödendiği görülmektedir.



Example 10.

1. Step:
Goods with similar tariff positions, similar names and properties but subject to different customs duties were researched.
2. Step:
Companies and the contents of their catalogues were analyzed.
3. Step:
Companies import goods that are not relevant to their business area and subject to low customs duties were listed in GUVAS.

8516.80

Electric heating resistors

Duty: 2.7 %

VAT: 6.7 %

85.33

Electrical resistors (including rheostats and potentiometers), other than heating resistors

Duty: -

VAT: -



Goods with 8516.80 commodity code are used in the following sectors;

- Automotive (Heating of seats, fire lighter, diesel engine)
- Electronic household devices (Iron, radiator, water heater etc.)

Declared:Commodity : **85.33**

(Resistance)

Duty: -

VAT: -

Found:Tarife: **8516.80**

(Resistance)

Duty: **2.7 %**VAT: **6.7 %****Total Tax Differences 2.2 Million TL****6.5. Contributions on Intellectual Property Rights (IPR)**

We live in a world in which IPR play a significant role. Every person can confront IPR notion at every circumstances from the goods we eat and wear to the goods we drive and utilize. While human beings are so indulged in IPR, customs administrations cannot refrain from that reality.

In accordance with TRIPS (Trade-Related Aspects of Intellectual Property Rights) under the WTO general agreement, Turkish Customs Code has a special regulation for IPR.

The article 57 of Customs Code numbered 4458 states that, the Customs offices shall detain or suspend the customs procedures of the goods infringing the authorizations of the right holder, upon the request of the

right holder or his representative, in reference to the rights that must be protected under the legislation on intellectual and industrial rights.

The second part of the article also states that the goods may be subjected to ex officio customs detention for a duration of three business days or the Customs procedures of the goods may be suspended by the Customs offices, in cases where no request has yet been made at the Customs Office, and where solid evidence is available showing that the goods in question are in breach of intellectual and industrial property rights; with a view to ensure the valid application of the right holder.

In accordance with these regulations, Risk Analysis Department of the Ministry establishes profiles or rules in order to closely follow IPR infringements. According to inner circular of the department, an interim injunction should be made before creating profiles and messages in the RA system. Risk profiles established to combat potential IPR infringements are based upon goods, companies, country, etc bases. These profiles or rules are revised according to IPR seizures.

6.6. Post-Clearance Audits Based upon Risk Analysis

In the old world, customs were places where entities and the state met. Every entity that wanted to make an import/export/transit transaction must have been ready at the customs zone or border point. However, things have changed with the advent of new technologies, increasing global trade volumes and globalization. In today's world, customs authorities are carrying their procedures, formalities and controls out after the clearance transactions are completed.

Risk analysis plays an important role in determining upon which companies/sectors/regimes/transactions/goods should be post-cleared, which of those not. In a general perspective, risk analysis or management enables customs offices, post-clearance controllers to identify, manage and cultivate information sources; to measure the risk; to take an effective and suitable action in a timely manner and to obtain feedbacks and review target accordingly.

According to 73th article of Turkish customs law titled "Post-Clearance Examination of the Declaration", customs administrations may, after releasing the goods and in order to satisfy themselves as to the accuracy of the particulars contained in the declaration, inspect the commercial documents and data relating to the import or export formalities in respect of the goods concerned or to subsequent commercial formalities involving those goods. Such inspections may be carried out at the premises of the declarant, of any other person directly or indirectly involved in the said operations in a business capacity or of any other person in possession of the said document and data for business purposes. Where appropriate the goods may be examined.

In addition, the "Regulation of Post-Clearance Controls and Control of Risky Transactions" states that the post-clearance controls will be performed on the premises of the declarants in order to detect risky transactions. It defines "risky person or transaction" as high-risk persons or transactions identified according to the risk criteria. The 18th article of the regulation formulates that each person subject to an audit shall be given a risk point based on the reports. These points shall be taken into account during risk assessment activities.

7. INTERNATIONAL COOPERATION ON RISK MANAGEMENT

Globalization is a process, not an end, which transforms the contemporary world step by step. In the classical world since the Westphalian peace, sovereign states have been major actors playing according to their wishes. With the advent of globalization, however, some issues that were monopolized by state have turned into international phenomena, such as human rights, environment, trade, etc. Additionally, some international actors began playing roles at the expense of state, such as international organizations, non-governmental organizations, trans-national companies, etc. Furthermore, from the illicit globalization perspective, transnational crime organizations pose challenges to state authority by attacking on enforcement agencies, ignoring state's regulations, and benefitting from enormous volumes of international trade transactions (Turna, 2015, p.12).

From this perspective, international, intergovernmental relations have turned into a necessity rather than an option. Being aware of the fact, Turkey has as well initiated and participated in several international and intergovernmental works. It has also developed relations on customs matters with neighbour and regional countries such as e-TIR Project with Iran, simplified procedures with Georgia, coordination offices with Greece and Bulgaria, etc. Some bilateral and multilateral initiatives on risk analysis are summarized in the below.

7.1. Risk Analysis Workshop in Azerbaijan

Ministry of Customs and Trade of The Republic of Turkey and State Customs Committee of Azerbaijan Republic signed the act plan of mutual assistance on customs enforcement area for the 2016/2017 term.

Representatives of our ministry were invited to Baku for the dates 15-19 February 2016 for the aim of sharing the practical knowledge accumulated in the ministry and their experiences related to risk analysis system on customs enforcement area to the Customs Committee of Azerbaijan.

Under the scope of this workshop, issues of workflow for the transaction at the Turkish Customs Administration on import, export, transit, warehousing, border gates and passengers; and risk analysis treatments on each of these processes; the logic laying behind these analyses, creating the risk profiles, working principles and circle of risk management, have been discussed in detail with the members of the Customs Committee of Azerbaijan.

During the ongoing process, the necessary information has been extensively provided to the members of Azerbaijan Customs on current risk analysis system and its technical infrastructure.

7.2. Turkic Council

The Cooperation Council of Turkic Speaking States (Turkic Council) was established in 2009 as an international intergovernmental organization, with the overarching aim of promoting comprehensive cooperation among Turkic Speaking States. Its four founding member States are Azerbaijan, Kazakhstan, Kyrgyzstan and Turkey.



Joint workshops regarding risk analysis have been arranged regularly since 2004 by the ministry, accumulated information and experiences on the matter are shared with staff of member states.

The latest meeting was held in Bishkek, Kyrgyzstan in 2018 with the participation of Risk Analysis Department of the Ministry. Main points, which were discussed in the forum, are:

- Risk management applications and examples of TCA
- Computer programs employed in risk analysis
- Significance of cooperation in risk management at international level
- Recent smuggling interception cases based on risk analysis

7.3. WCO Customs Risk Management Compendium

WCO Risk Management Compendium includes practical and operational tools that allows Customs to assess, profile and target the flows of goods, people and means of conveyance, and to determine what levels of intervention may or may not be required.

The Compendium is comprised of two separate, but interlinked volumes. Volume 1 sets out the organizational framework for risk management and outlines the risk management process. Volume 2, available to Members only, deals with risk assessment, profiling and targeting tools that inform selection criteria for identifying high-risk consignments, passengers and conveyances for Customs intervention.

TCA led the works in preparing the manual for land border and conveyances risk indicators within the compendium. TCA is participating in preparation of the manual for train risk indicators as well.



7.4. Risk Management Twinning Project

The twinning project, entitled “Modernization of the Turkish Customs Administration VI – Risk Management”, ran for over one year, from 1 February 2012 to 22 February 2013. Its aim was to improve the ability of customs officers to curb illicit trade in commercial goods, as well as narcotics and explosives, in order to secure a potential future external border of the European Union (EU) and to ensure that Turkish Customs is in a position to fulfil the tasks and obligations of an EU-compatible customs administration.

Twelve workshops and 38 seminars were held in Turkey, with 727 Customs officials from the central and local Customs offices participating. In addition, 35 Customs officers went on study visits and undertook traineeships in Germany and the United Kingdom,





while 16 staff members attended train-the-trainer courses on new training methods and approaches in teaching Customs techniques.

A “Business Strategy” and “Risk Analysis Guideline” have also been produced. The Risk Analysis Guideline explains how to carry out risk analysis and, in particular, identify relevant data so that it may be used to analyse and target suspicious consignments. It also includes examples of analyses and seizures made. Turkish Customs did not merely review and update its risk management system; the project also enabled it to implement a new organizational structure for the risk management system at regional level.

Five of the activities that took place during the project were aimed at introducing simplified procedures in Turkey that are already applied in Germany and the United Kingdom. While project activities were under way, a new Customs Code entered into force on 10 January 2013, which covers concepts such as the authorized trader, local clearance and authorized consignor and consignee, thereby ensuring that the Code is compatible with that of the EU.

When it comes to the post-clearance audit side, a twinning project was also successfully completed. Throughout the twinning, Turkish and German customs authorities closely worked, Turkish customs officers took the chance to review German customs’ risk based post-clearance practices. Many administration and company visits were held in order to be such practices seen in the field.

7.5. ECO Smuggling and Customs Offences Databank

The Economic Cooperation Organization (ECO) is a Eurasian political and economic intergovernmental organization, which was founded in 1984 in Tehran by the leaders of Iran, Pakistan, and Turkey. It provides a platform to discuss ways to improve development and promote trade and investment opportunities.

The first meeting on Establishment and Operation of ECO Smuggling and Customs Offences Databank was held in Ankara, Turkey, on February 20th, 2018. It was organized by the Ministry of Customs and Trade of the Republic of Turkey by the participation of representatives of the Republic of Azerbaijan, the Islamic Republic of Iran, the Islamic Republic of Pakistan and the Republic of Turkey, who are the contracting parties to the Agreement on Establishment and Operation of ECO Smuggling and Customs Offences Databank. In this scope, the representatives of the Contracting Parties exchanged views and agreed on the Data Entry Fields of the Data Bank. These studies are very significant since those countries are interacting intensely with each other. The establishment of common database and sharing of which will facilitate trade among those countries and will help the risk ratios and evaluations gradually decrease.

7.6. International Relations with Other Countries

TCA has very strong relations with several countries in the Balkan, Baltic and Middle East regions. Since Turkey is one of the the most important countries in those regions, TCA should follow the same route. TCA attaches a great importance on strengthening international cooperation in order to be both an example to those countries and benefit from their experiences.

TCA held meetings with Moldovan Customs in this respect in 2017. Risk Analysis Department also made a presentation to explain its risk methodology including real examples and practices. Lithuanian Customs visited the department in 2018 to understand the safety and security measures of the Ministry and to utilize it in a twinning project, which was performed between interior ministries of two countries. TCA visited Albanian Customs in 2018 for increasing relations with each other. TCA participated in high-level seminar on the exchange of customs-related information in Bulgaria, and stated the importance of sharing risk profiles/ rules between the EU and Turkey. Almost all of these study visits and works have concluded in the signature of a memorandum or an agreement, which has led the improvements in relations.

7.7. WCO Activities

MoT cooperates with a range of organizations and associations; WCO takes place on the top, not only for improving its capacity but also for sharing its experiences.

34th Session of the Enforcement Committee of WCO was held at the WCO Headquarters in Brussels in 2015. The theme of the session was “Customs Enforcement: Completing the Cycle”. One of the agenda items of this meeting was intelligence and risk management. TCA had been invited to the meeting and a presentation on the subject of strengthening risk management under the agenda item V-d was made by TCA. It included the approach of TCA to the risk management concept, the structure and functions of risk management system in Turkey, and seizure examples as the results of risk analysis techniques.

Besides that, representatives from TCA was selected to attend to the Strategic Trade Control Enforcement (STCE) Train the Trainer workshops held by WCO in Brussels on various dates. STCE Program is a substantial tool developed by WCO to effectively enforce strategic trade controls, as called for by United Nations Security Council Resolution 1540. TCA has been making high level of efforts for a long time to support the mission of the WCO on this issue



8. CONCLUSIONS AND RECOMMENDATIONS

Risk management and analysis concepts have gained prominence at customs with the growth of global trade volumes. At the same time, they are practical, efficient and useful solutions to determine which goods, conveyances and transactions will be subjected to physical or documentary control. In this sense, the use of risk management techniques by member countries of OIC is crucial to find a comprehensive solution to the problems at the customs. Inspired by TCA experiences and practices, several conclusions and recommendations may be reached in the blink of an eye.

1. Risk management and trade facilitation are two sides of the same coin. To facilitate trade, a country should manage customs risks properly and constantly. Facilitating trade boosts the volume of trade, bringing wealth and prosperity and improves a country's level of competitiveness. In other respect, CRM system is one of the key elements of trade facilitation that makes it possible to maintain a good level of trade facilitation and customs compliance at the same time, enabling selectivity in customs controls.
2. There is an ongoing and deep cooperation among the EU member states about risk management systems, which enables countries to share risk profiles or rules with each countries. Thus, each member country becomes more alert and informed about possible risk factors before starting any transaction within the EU zone. The members of the OIC, as parts of the Islamic Ummah, can establish a similar cooperation platform in order to share risk profiles or rules with each other. This kind of initiative, which demonstrates the trustworthiness or amanah characteristic of the Islamic Ummah, will enable both to promote export and to facilitate trade among OIC countries by making transactions and controls more effective and faster. It would also be beneficial for increasing cooperation to appoint risk analysis contact points between member countries in order to exchange risk related data, information and intelligence.
3. There is an urgent need to analyze customs large amount of data, which is "big data". Old methodologies and technologies, which consist of the use of computer programs and manual applications, cannot meet the contemporary demands, which necessitates using modern data mining algorithms. The use of data mining techniques which provides customs administrations to analyze the big data with the most efficient and modern methods such as machine learning, statistical and mathematical models, decision trees will contribute to the risk analysis processes of customs administrations. Data mining techniques are significant in many sides since they enable customs to focus on more risky areas, to increase selectivity and the redresse rates and to facilitate trade by accelerating formalities of regular traders.
4. Risk management and analysis are mainly fulfilled at the central level, but implemented completely at the regional level. In fact, risk management is a structure that feeds customs officers/inspectors/examiners working in the field. Thus, the interconnectedness between the central one and local one is of crucial importance. On the one hand, the central one notices the outputs of its efforts and is motivated; the local is provided with valuable information about which entity is more risky, can be ignored on the other hand. The feedback mechanism that demonstrates relations between profiles/rules and their results steps in at this point. Customs authorities should receive all the feedback data electronically and evaluate it in a consistent manner.

5. Electronic clearance systems and data warehouses can be considered mandatory in building a sound risk management system, so it would be an important point to encourage the member countries to develop electronic systems to collect data on customs procedures. The electronic clearance systems should be designed as a whole structure connecting all customs procedures, and should be traceable from point A-to-Z. Customs officers both at the central and local levels should be well trained in order to be equipped with required information and best practices for implementing risk analysis processes. Strategy document and national action plans are the ultimate needs as building, developing or improving a risk management system.
6. There are a number of international sources on trade facilitation and risk management, which have been developed, with contributions of several international organizations, such as WTO, WCO, and UN. The customs administrations of member countries should also benefit from the international experiences, texts and documents such as Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures, Risk Management Compendium and SAFE Framework of Standards to Secure and Facilitate Global Trade of WCO and so on.
7. Some activities like study visits, internships and workshops between OIC member states to raise awareness of risk management concept can be useful and productive tools for OIC members. Implementation activities for this aim may include training sessions and seminars organized by proper parties such as best-practice countries, private sector entities and the WCO etc.
8. Though it is possible to say that every customs administration and officer applies some form of risk management either formal or informal, first systematic risk management studies go back to 1998 in Turkey, when the electronic customs declaration system BILGE was built. Since then Turkey has been taking important steps to continuously review and improve its CRM system, following the technological and international developments. Loaded with so much experience, TCA is ready to share its experience and knowledge in building risk management infrastructure or reviewing the existing CRM systems in greater detail by arranging workshops and study visits with OIC member countries.



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