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**Master's Degree in
Engineering and Management**



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Export Compliance as a

Response to Export Control

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Abstract

Exporting dual-use items and technology can endanger territorial or overall security, as well as contribute to the proliferation of WMDs resulting in serious violations of basic human rights and international humanitarian law. For reasons linked to the non-proliferation of weapon of mass destruction, the European Union has established many regulations to control the export, transfer, brokering, and transit of "dual-use items".

This report presents a set of definitions related to dual-use goods and its controlled activities in case of export, transfer, brokering, transit, and the type of authorizations needed. The study will examine the export process of the company, outlining all company's export-related procedures and operations. This examine will help the company to discover its significant and vulnerable areas in its export process and where internal controls are missing. To deliver what said before, a risk assessment is presented to help the company to identify and mitigate these risks.

The report will also present a description of internal compliance program (ICP) and its core elements. During the analysis of core elements of ICP, a framework will be developed and proposed. Finally, a case study will be introduced, analyzed, and evaluated at end. The analysis will focus on the export process of the company, classification of dual-use goods, end-users, customs classification, authorizations requirement.

Abbreviations

AG	Australia Group
CEO	Chief Executive Officer
CN	Customs/tariff
EU	European Union
ECO	Export Compliance Officer
ICP	Internal Compliance Program
MITEC	Modern Industries Technique Company
MTCR	Missile Technology Control Regime
MECR	Multilateral Export Control Regime
NSG	Nuclear Suppliers Group
R&D	Research and Development
US	United States
WMD	Weapons of Mass Destruction
WA	Wassenaar Arrangement
ZC	Zangger Committee

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1 Introduction

1.1 The Dual-Use Dilemma

Dual-use products account for a large amount of EU trade with key partners. Thousands of small, medium, and big corporations, as well as research institutes and communities, work in the EU dual-use industry, creating high-value-added jobs in a variety of vital areas.

Innovative work (R&D), creation, and exchange of regularly cutting edge progressed items across a wide scope of common ventures, including media communications, aviation, energy, security, chemical and pharmaceutical enterprises, lasers and navigation, life sciences, clinical and automotive material handling hardware, gadgets, semiconductor, are impacted by dual-use trade controls. Thus, EU export controls are critical to the EU's pursuit for innovation and competitiveness.

Exporting dual-use items and technologies can represent a threat to territorial or overall security, as well as add to the spread of weapons of mass destruction which could prompt serious violations of basic human rights and international humanitarian law. Accordingly, the EU has established a system to manage the export, transfer, brokering, and transit of "dual-use goods" to add to world harmony and security.

Dual-use items are in the midst of the two categories. They are vital revenue streams for developed (and, increasingly, developing) governments, but they also offer an unquantifiable security risk. Furthermore, as the technology revolution progresses, dual-use products are becoming more important, and governments are transitioning from "spin-off" (commercializing military innovations) to "spin-on" (specializing commercial goods for military use) in their military. When the boundary between military and civilian items narrows, controlling dual-use trade turns out to be riskier. As a result, from a practical standpoint, a greater knowledge of trade in dual-use items is critical. Investigating dual-use exports can also reveal how countries balance economic and security concerns, among other considerations.

1.2 Export Violations

The identification, investigation, and, where necessary, punishment of any violation of export controls is one of the most severe and difficult issues in the efficient execution of such restrictions. Even the European Union, which is the only regional organization with a unified legislative framework for regulating the trade in dual-use and, to some extent, military equipment faces many difficulties. One illustration of this situation is how many instances of export control infringement that have been indicted and effectively prosecuted in EU part states [1].

Examples of export violations:

- Italy's weapons exports to Libya and Iran:

The tax section of the Italian financial police of Venice detained three Italian nationals on January 31, 2017. Weapons produced in the Soviet Union, including anti-tank and surface-to-air missiles, helicopter spare parts, and ammo, were sold illegally. The items were negotiated and sold in several nations across Europe, Africa, and Asia and shipped to Libya and Iran without traveling through Italian territory [2].

- Export of chemicals from Belgium to Syria:

Three Belgian firms and two directors were found guilty of unlawfully transporting 168 tons of isopropanol to Syria by the Penal Court of Antwerp on February 7, 2019. The chemical has a range of civilian applications and is a significant component of the nerve toxin sarin [3].

- Export of valves from Germany to Iran:

Four German people were held by the German Federal Prosecutor General in 2012 on suspicion of delivering valves to Iran in violation of the EU's embargo on the country. The deliveries, which were part of a multimillion-euro transaction, took place between 2010 and 2011. To avoid detection, the exports were disguised as supplies to Azerbaijan and Turkey. In reality, the end-user was the MITEC, which was in charge of building Iran's heavy water reactor in Arak and is therefore subject to the EU's embargo on Iran [4].

- Iran imports airplane spare parts from the United Kingdom:

Between February 2010 and March 2016, three British citizens, Alexander George, Paul, and Iris Attwaters, were found guilty of unlawfully transferring military and dual-use materials to Iran, including US F-4 Phantom and Russian components, by the Southwark Crown Court in the United Kingdom. Investigators from HMRC discovered that George was sending aircraft components to Iran via companies he controlled in Dubai Malaysia. He enlisted the help of the Attwaters to help obscure the smuggling operation further, and they supplied parts through their company, including some that were prohibited by WMD prohibitions [5].

1.3 The importance and evolution of EU regulation

One of the most serious concerns of our day is preventing the spread of weapons of mass devastation. The reality is that several countries aspire to acquire or build weapons of mass destruction for themselves, or to gain the technology to make such weapons and perhaps sell them to other countries for a profit. To successfully combat proliferation, the European Union member states, as well as practically all other industrial nations, have pledged to prevent the spread of weapons of mass destruction and to control the export of dual-use items to sensitive countries.

Since the early 1990s, the European Union has taken many steps to strengthen the coordination and convergence of member states' export restrictions. A long-standing aim has been the creation of uniform export restrictions on dual-use items, such as commodities, software, and technology that may be used in both civilian and military applications. The first pieces of EU law in this area were adopted in 1994 [6], following discussions in the 1980s and early 1990s. 1 In 2009 [7], regulation (EC) 428/2009, a considerably modified version, was approved.

A review of the 2009 rule was initiated in 2011 by the European Commission, the European Parliament, and the European Council. Because of this approach, on September 9, 2021, a new version of the dual-use regulation (the recast, or the 2021 recast) went into force. This document examines the topics and ideas considered, as well as the significant modifications made, in the review and recast of the 2009 legislation.

Through these regulations, the EU has developed a unified legislative structure for member states' laws on the export, re-export, brokering, and transit of dual-use items. They've also created tools, such as a list of restricted dual-use items, that nations outside the EU may use to improve their export restrictions, as well as outreach and help from the EU [8]. Implementing internationally agreed non-proliferation commitments and avoiding illegal transfers to weapons of mass destruction programs were two main goals when the EU established dual-use export controls [9].

1.4 Facing challenges including technology progress and foreign countries matters

Emerging technologies are distinct, rapidly developing, and frequently disruptive technologies that are increasingly generated from civilian technological innovation and frequently lack consensus on risk assessment [10]. Emerging technologies provide several issues in terms of design, implementation, and export control compliance. It should be remembered, however, that emerging technologies are not a new occurrence and have previously posed a challenge to export regulations. The precise issues they provide are, in many circumstances, neither novel nor unique, having been experienced earlier in the context of other restricted items or technology. Emerging technologies, on the other hand, provide a unique set of obstacles and uncertainties that limit the efficiency of standard export control strategies. During the update of the dual-use legislation, addressing the issues posed by prospective military or WMD uses of emerging technologies became a significant focus of concern.

Technology progress is not only the challenge the world is facing but also supplier diversification and proliferation could be as more states now are dealing with dual-use technology. There has also been at least some extended proliferation of chemical, biological, nuclear weapons, and their delivery system technology in many countries. Take an example the missile technology that has significantly spread in many countries and has been used in the last decades. As there is no monopoly on sensitive dual-use technologies, this has raised much concern that should be considered as well as should be controlled.

The standard method of adding or amending goods on multilateral export control regimes' (MECR) control lists is fraught with difficulties. The stages needed in identifying and analyzing a technology's hazards, developing, and obtaining consensus on controls, and implementing at the national level, especially in the case of emergent technologies, make for a time-consuming process. While there are several effective practices, most of them need the alignment of numerous elements and interests to provide timely controls. Complementary national controls, such as temporary technology listings and catch-all regulations, might provide more rapid control mechanisms.

2 Dual-use Goods

2.1 Definition

Goods, software, and technology that can be used for both civil and military purposes are known as dual-use items [11]. Materials, components, and whole systems utilized in the manufacturing or development of military goods and weapons of mass destruction are examples of dual-use items. It includes all items that can be utilized for both non-explosive and explosive reasons in the manufacture of nuclear bombs or other nuclear explosive devices. They all have legitimate civil uses, but they could also be abused by military, repressive regimes, or even terrorists. Night vision systems, parachutes, plant infections, microbes, and electronics components such as transistors are just a few examples.

There are ten different types of dual-use commodities that are recognized across the world. These categories are then further segmented into five sub-categories. These categories help with the export and import operations.

The categories are as follows:

0. Nuclear materials, facilities, and equipment
1. Special materials and related equipment
2. Materials Processing
3. Electronics
4. Computers
5. Telecommunications and information security
6. Sensors and lasers
7. Navigation and avionics
8. Marine
9. Aerospace and Propulsion

Subcategories are:

- A. Systems, Equipment, and Components
- B. Test, Inspection, and Product Equipment
- C. Material
- D. Software
- E. Technology

2.2 Regimes

Multilateral agreements established lists of items that must be regulated to prevent the spread of nuclear, biological, and chemical weapons and their delivery systems, as well as the destabilizing buildup of conventional armament and dual-use commodities. The export control regimes refer to:

- 1) The Nuclear Suppliers Group (NSG): a network of nuclear-supplier countries aiming to contribute to nuclear non-proliferation by implementing two sets of nuclear and nuclear-related export standards [12].
- 2) Zangger Committee (ZC): By refusing to provide a source of special fissionable material, as well as equipment or material specifically designed or prepared for the processing, use, or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, it established guidelines for implementing the Nuclear Nonproliferation Treaty's export control provisions [13].
- 3) Missile Technology Control Regime (MTCR): is an intergovernmental group tasked with preventing the spread of ballistic missiles and other unmanned delivery systems capable of carrying out chemical, biological, or nuclear attacks [14].
- 4) Australia Group (AG): is an informal agreement intended at decreasing the potential of states contributing to the proliferation of chemical and biological weapons by exporting or transshipping them [15].
- 5) The Wassenaar Arrangement (WA): was established to encourage better openness and accountability in the transfer of conventional weapons and dual-use items and technology, therefore reducing the risk of destabilizing accumulations [16].

2.3 Controls activities

An authorization will not be required for every research effort involving dual-use materials. The European Parliament and the Council of the European Union specified, on Regulation (EU) 2021/821, five sorts of activities that must be authorized depending on the activity on [17]:

- For movement or transmission outside the EU's customs area, every dual-use item listed in Annex I of the EU dual-use Regulation requires export authorization.
- Only the dual-use goods listed in Annex IV to the EU dual-use Regulation require a transfer authorization for transportation or transmission inside the Union's customs area.

Add to the mentioned above, the three items listed below are authorization requirements that must be met on a case-by-case basis.

- Items transiting through the Union's Customs area require a transit authorization.
- For the brokering of products listed in Annex I between third countries from within the Union's customs territory, a brokering authorization is required.
- For the provision of technical assistance linked to the dual-use products mentioned in Annex I, authorization is necessary.

2.4 Export restrictions for dual-use products that aren't on the list

Even if dual-use objects are not mentioned in Annex I, due to technological possibilities or suspected end-use of concern an authorization is necessary. This is known as the "catch-all control," and if the company think its items could be used in one of the situations listed below, it should contact its national authority for additional information.

Under Article 4 of Regulation (EU) 2021/821 [17]:

“An authorisation shall be required for the export of dual-use items not listed in Annex I if the exporter has been informed by the competent authority that the items in question are or may be intended, in their entirety or in part”

- 1) *“for use in connection with the development, production, handling, operation, maintenance, storage, detection, identification or dissemination of chemical, biological or nuclear weapons or other nuclear explosive devices or the development, production, maintenance or storage of missiles capable of delivering such weapons”*
- 2) *“for a military end-use if the purchasing country or country of destination is subject to an arms embargo”*
- 3) *“for use as parts or components of military items listed in the national military list that have been exported from the territory of a Member State without authorisation or in violation of an authorisation prescribed by the national legislation of that Member State.”*

Under Article 5 of Regulation (EU) 2021/821 [17]:

“An authorisation shall be required for the export of cyber-surveillance items not listed in Annex I if the exporter has been informed by the competent authority that the items in question are or may be intended, in their entirety or in part, for use in connection with internal repression and/or the commission of serious violations of human rights and international humanitarian law”

Under article 9 of Regulation (EU) 2021/821 [17]:

“A Member State may prohibit or impose an authorisation requirement on the export of dual-use items not listed in Annex I for reasons of public security, including the prevention of acts of terrorism, or for human rights considerations”

2.5 Types of authorizations

According to ‘subject and definitions chapter’ mentioned in article 2 in Regulation (EU) 2021/821 [17]:

- Individual export authorization:

“individual export authorisation means an authorisation granted to one specific exporter for one end-user or consignee in a third country and covering one or more dual-use items”

- Global export authorization:

“global export authorisation means an authorisation granted to one specific exporter in respect of a type or category of dual-use items which may be valid for exports to one or more specified end-users and/or in one or more specified third countries”

- large project authorization:

“large project authorisation means an individual export authorisation or a global export authorisation granted to one specific exporter, in respect of a type or category of dual-use items which may be valid for exports to one or more specified end-users in one or more specified third countries for the purpose of a specified large-scale project”

- Union general export authorization:

“Union general export authorisation means an export authorisation for exports to certain

countries of destination that is available to all exporters who respect the conditions and requirements listed in Sections A to H of Annex II”

- National general export authorization:

“national general export authorisation means an export authorisation defined by national legislation in accordance with Article 12(6) and Section C of Annex III”

Add to these authorizations mentioned above, EU regulated other authorizations that related to Dual-use control as:

Under article 6 of Regulation (EU) 2021/821 [17]:

“An authorisation shall be required for the provision of brokering services of dual-use items listed in Annex I if the broker has been informed by the competent authority that the items in question are or may be intended, in their entirety or in part, for any of the uses referred to in Article 4(1)”

Under article 7 of Regulation (EU) 2021/821 [17]:

“The transit of non-Union dual-use items listed in Annex I may be prohibited at any time by the competent authority of the Member State where the items are situated if the items are or may be intended, in their entirety or in part, for any of the uses referred to in Article 4(1).”

Under article 8 of Regulation (EU) 2021/821 [17]:

“An authorisation shall be required for the provision of technical assistance related to dual-use items listed in Annex I if the provider of technical assistance has been informed by the competent authority that the items in question are or may be intended, in their entirety or in part, for any of the uses referred to in Article 4(1)”

Under article 11 of Regulation (EU) 2021/821 [17]:

“An authorisation shall be required for intra-Union transfers of dual-use items listed in Annex IV. Dual-use items listed in Part 2 of Annex IV shall not be covered by a general authorization.”

3 Export Process

3.1 Delineate company's current Export Processes

Despite the size and complexity of the organization of the company, forming a task force of employees who know the company's operations will help in implementing an internal program that will ensure compliance with EU dual-use regulation. The best way to identify these key employees is to identify the offices and divisions that involved in the export process as:

Accounting, Human resources, Legal Counsel, Sales/marketing, engineering/R&D, customer service, information technology, financing, etc.

The next stage is to figure out how a corporation goes about exporting its goods. The task force can develop processes for operational execution that will be included in the company's employee program by asking "What happens next?". This initial phase of outlining all company's export-related procedures is similar to writing home blueprints. Once the company specified all of it is processes in narrative and flowchart form, it will have its blueprint and can start building its compliance components into its export program brick by brick, depending on its continuous risk evaluations.

The process knowledge expert(s) should outline one process at a time. They should monitor the whole procedure, pointing each activity and decision. When recording a process, they should start from where it begins, such as with sales, customer service, research, or the administration office, and continue to the end.

Description of export flow process:

A. Tangible Item

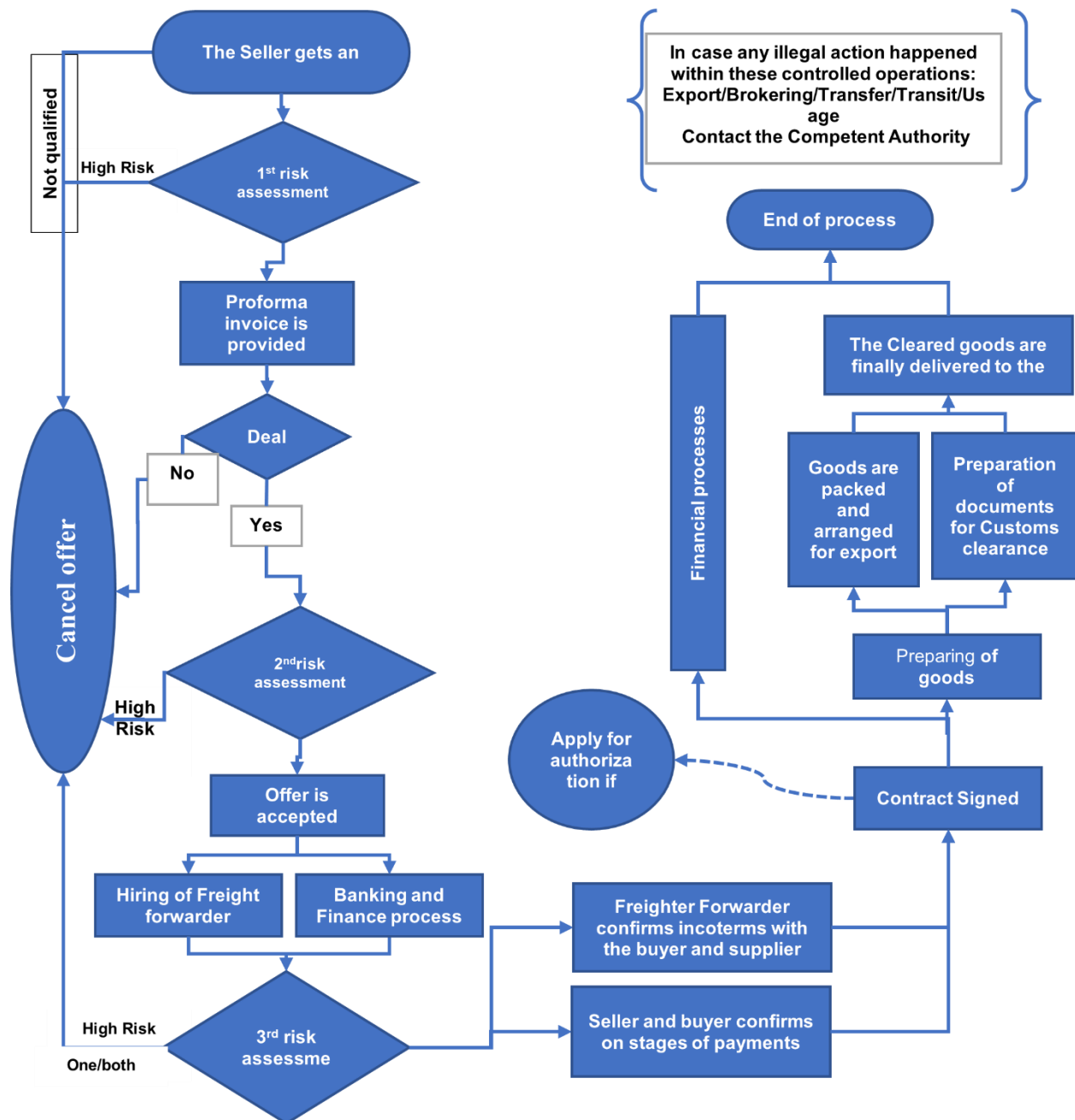


Figure 1 Export process of Intangible goods

The first stage in the shipping process starts when the importer(consignee) orders goods from a supplier (consignor). When looking at goods to buy in a typical import, buyers would often ask suppliers for a quote. A proforma invoice is frequently included with or in the form of a quote. A proforma invoice is essentially an invoice that serves as a rough estimate and is subject to modification.

In the second stage, the negotiation between the buyer and the seller will start based on the price, quantity, and other details about the transaction. The consignee will frequently begin creating a purchase order after the quota has been approved. A purchase order is just a contract that outlines the order's contents as well as the price of the products.

At the third stage, once the purchase order is approved, two important processes will take place one is related to hiring a freight forwarder and the other is related to the banking and finance system. At this crucial stage, the company will examine which bank and freight forwarder it will deal with.

At the next one, the seller will agree with the buyer about the incoterms of the export. Incoterms are the conditions that allocate the expenses and risks of shipping between the customer and the seller. They decide who is liable for what when the items are being transported from point A to point B. It is vital to choose the most appropriate set of Incoterms for the transaction. Failure to use the right incoterm might end up costing a customer a lot more money than they expected.

At this stage also the buyer will agree with the buyer about the stages of payments. When a purchase order is placed, obtaining a letter of credit is a popular approach to pay the supplier. This is one of the most popular payment options for international shipping since it is one of the safest. It's essentially a legally enforceable contract issued by a financial institution (such as a bank) that guarantees payment for goods. A buyer would usually ask for a letter of credit from a bank, detailing their order in detail. When the bank completes the letter, it will be sent to the supplier's bank, which will examine it to confirm that the supplier agrees to the terms and conditions before the items are manufactured.

Following this, the supplier will provide an order confirmation and a commercial invoice to the importer. This invoice is a crucial document that specifies the price and quantity of products sold. It will also include the incoterm that was utilized. The commercial invoice must be kept in a safe location by an importer since it serves as proof of sale and is necessary for customs clearance. At this point also where the contract will be signed the company has to take into consideration if authorization is needed depending on the items exporting, end-user, end-use, etc.

At the next point, the buyer will start the preparation of the goods that will be arranged for the export. Following this, the seller will need to make additional preparations for many crucial papers such as packing list, certificate of origin, inspection certificate, dual-use license if applicable, etc., that will be utilized in the overseas shipping procedure and are necessary for customs purposes. The supplier must make a booking for the export shipment after all the needed documentation is in place. The items will then be transferred to a depot or port for shipment after they are packaged and ready. This will be organized by the supplier or the consignee through their freight forwarder, depending on the shipping incoterms. The export approval process can then begin.

A bill of lading is produced when a carrier comes to pick up the goods. A bill of lading certifies that the goods were received in satisfactory condition by the carrier. This is a very significant document since it serves as proof of legal ownership of the property. The consignee will need to get the bill of lading from the supplier. To secure the release of the shipment and claim ownership of the items, the buyer will be needed to provide the bill of lading. A shipment may have several bills of lading. If items are being transported from a warehouse to a seaport, for example, a supplier may demand an 'inland' bill of lading for the goods to travel via international transit.

The products will be handled via export customs clearance before departure. All documentation is evaluated and double-checked here by government authorities. The goods will be shipped after this point and when reaching the destination country; they must go through an import clearance process.

For the tangible goods, the same process will proceed as that of intangible goods in case the tangible is exported in intangible item (e.g., hard-copy slides or physical data storage device), but without the need of freight forwarder. The company at this point must inform the airport customs about the goods that are being transported. At this point also an authorization must be applied if needed. Whereas if the tangible items are transferred electronically, visually, or orally, there will be no need for customs clearance or freight forwarder. At this point, authorization must be applied if needed.

3.2 List of documents

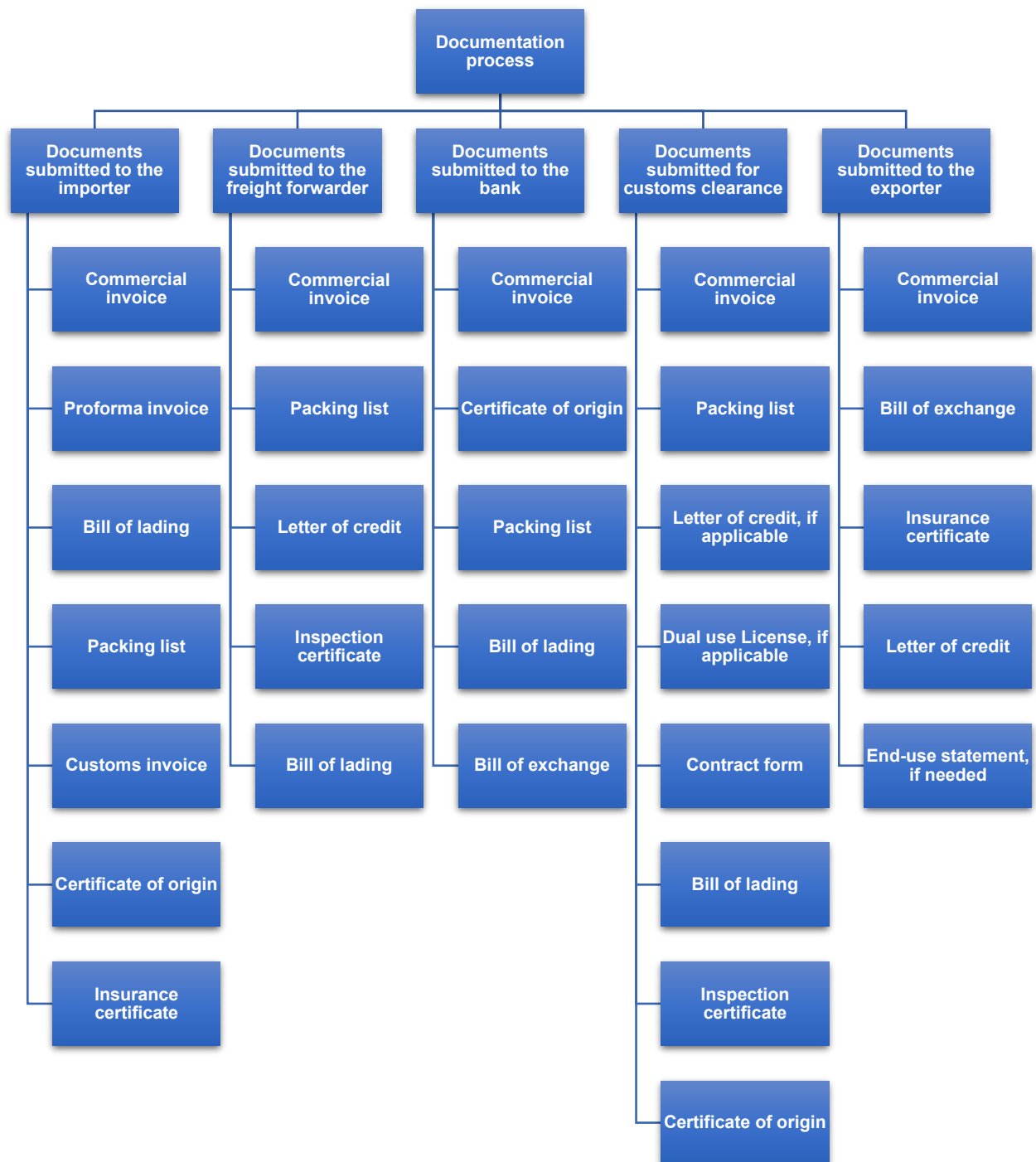


Figure 3 List of Documents

1. Proforma invoice

A proforma invoice is a bill of sale that is issued to the customer before the task is done. It's a commitment to supply products or services that haven't arrived yet. It outlines the job to be done, as well as the amount and price the company will charge for the goods or services.

Proforma invoices are those that have not yet been finalized, hence they do not include an invoice number, which is required for every legal invoice. A proforma invoice, unlike an invoice, is a quotation or estimate that details the products and services that a seller agrees to sell [18].

2. Commercial invoice

A commercial invoice is a form that is used to clear goods through customs. It is used by an individual or corporation exporting an item across international borders as a customs declaration. Despite the lack of a uniform structure, the document must contain a few crucial information, as [19]:

- Name and address of the seller
- Name and address of the consignee
- Invoice date
- Purchase order or invoice number
- A complete description of each item being shipped
- Customs Harmonized Codes
- Country of origin
- Shipper's signature and date

3. Certificate of origin

The certificate of origin is an official document that certifies the site of production, extraction, or manufacturing of items, or the location of the most recent significant alteration. It does not certify the shipment of goods and it can be used for [20]:

Credit: It's possible to utilize it to ask for a letter of credit.

Customs: When products are cleared, the competent authorities of an importing nation can utilize them to determine the proper customs treatment.

4. Bill lading

A bill of lading is a legal document that specifies the kind, quantity, and destination of goods being transported by a company. When the transporter delivers the goods to a specified location, the bill of lading also functions as a shipping receipt. This document must be signed by an authorized representative from the freight forwarder, shipper, and receiver and must accompany the sent items, regardless of the mode of transit [21].

A bill of lading typically includes the seller and buyer names and addresses, as well as the shipping date, precise weight, value, quantity, and freight classification. A detailed description of the goods is also provided, including whether they are classified as hazardous, the type of packaging used, any special carrier instructions, and any special-order tracking numbers.

5. Letter of credit

A letter of credit, sometimes known as a "credit letter," is an assurance from a bank that the seller will get payments on time from the buyer. The bank will be forced to cover the whole or remaining cost of the transaction if the buyer is unable to make a payment on the acquisition [22].

6. Packing of list

A packing list is a document used in international trade. It offers information about the shipment to the exporter, ultimate consignee, international freight forwarder, such as how it's packed, the dimensions and weight of each package, and the markings and numbers on the outside of the boxes. Some important details to include [23]:

- Date
- Destination of the shipment
- Origin address
- Consignee contact information
- Shipper and exporter contact information
- A detailed description of each package
- The weight and volume of each package
- Commercial invoice number for the shipment

7. Inspection certificate

Importing specified consumer products necessitates the use of an inspection certificate, which is a necessary trade document. An inspection certificate certifies that the products in a shipment have been inspected by a competent authority and found to comply with the sales contract's requirements. It determines if the items meet all quantity, quality, import eligibility, tariff classification, and price standards [24].

8. Bill of exchange

A bill of exchange is a written declaration that obliged one party to pay a specific quantity of money to another party on demand or at a predetermined date. It is mostly used in international trade [25].

9. Insurance certificate

This document, acquired from the freight forwarder, is intended to reassure the consignee that the shipment is covered by insurance during transit (marine/air insurance) [26].

10. Dual-use License:

If needed, the company must apply for a license for the exporting items. The licenses are issued upon the submission of an application with the required papers (declaration of end-use, supply contract, etc.).

3.3 Risk assessment

Risk assessment is a key requirement for identification and assessing the compliance risks in foreign trade. Companies are affected differently by their compliance requirements depending on aspects such as their size, structure, the scope of operation, client portfolio, and their unique business activity and types of goods. The risk analysis' purpose is to determine which of the company's parts should be included in the internal export control program and to assist the company's export control compliance needs.

Businesses must determine which legal rules must be followed in international trading. The legal landscape is continuously shifting. The same may be used for the factors that determine how much a company is subject to export controls. As a result, risk analysis is a never-ending process that requires regular improvement. Changes in the product portfolio, client base, and company operations, much like changes in the legal situation, must be monitored and appraised.

The below flow chart represents the main risks that the company could face. The risks could be organized under these areas:

- Classification of dual-use item
- End-user check
- End-use check
- Banking and finance process
- Order processing
- Organization operations

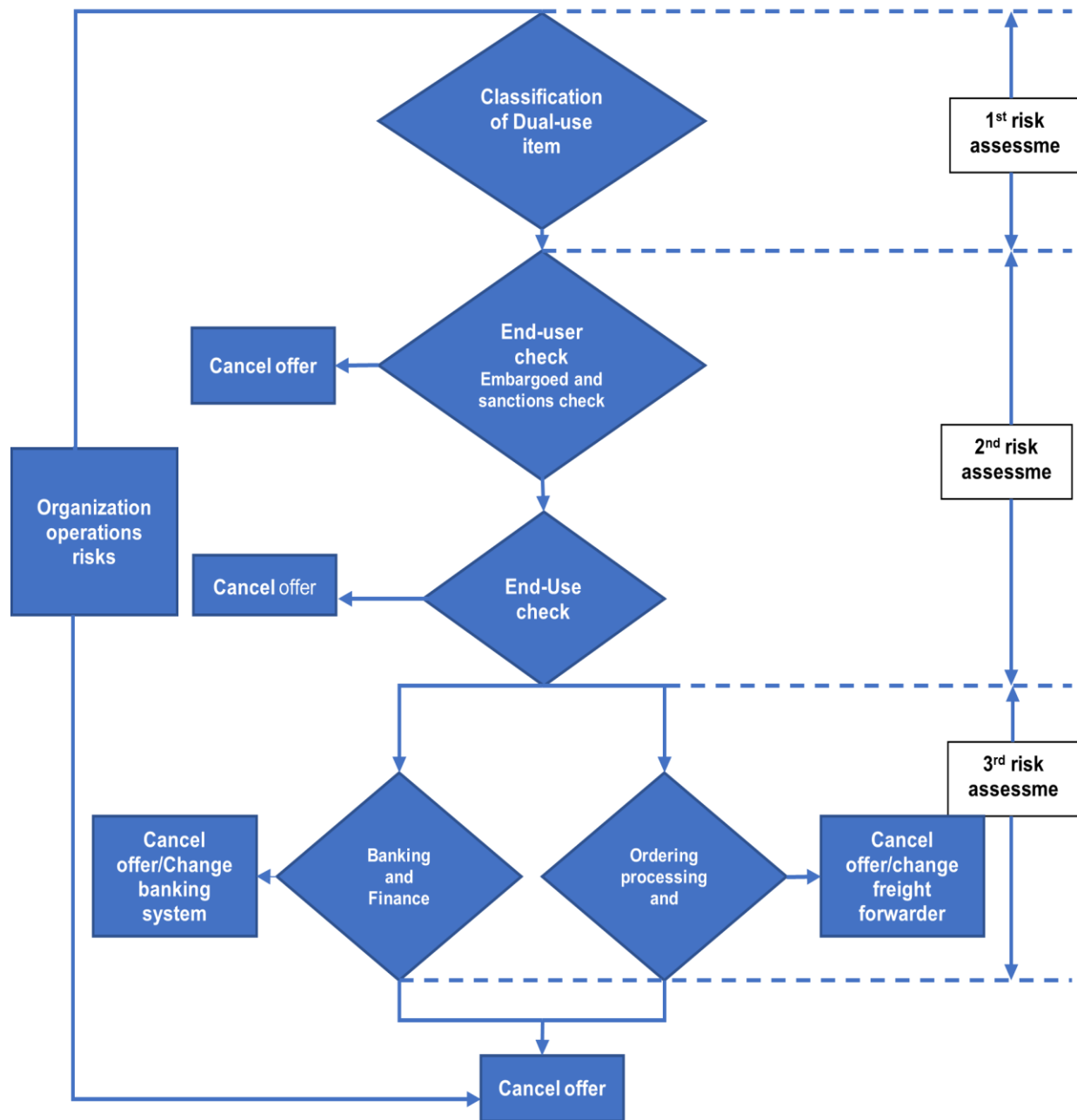


Figure 4 Risk Assessment

ASSESSING AND MITIGATING RISKS AND VULNERABILITIES

Once the company documents its export process, it should Analyze its procedures to see how successful its current overall compliance program is. It should determine whether it has any vulnerable areas by examining its internal control systems. Second-level approvals, embargoes, and sanctions check, requirements for collecting certain end-use information, completion of checklists of activities to be completed before following stages, and so on are examples of internal controls.

If the organization discovers that there are significant points in its processes where internal controls are missing, it must analyze the risk associated with the lack of control at that point and mitigate it. It should concentrate its resources on the 'high risk' areas after it has identified all its areas of vulnerability.

To remove all areas of vulnerability and risk, the organization should implement checks, safeguards, processes, and monitoring. The following step in the cycle may be evaluating, auditing, and assessing, in which the organization determines how effective its protections are and how they can be improved. As a result, the dynamic cycle of compliance returns the organization to where it started: evaluating what it has in place to discover weaknesses, enhancing procedures, and staying current.

To identify the vulnerable areas, ways to mitigate these risks, and safeguards needed to control these risks, the company must define the parameters of its export program, including:

Business activity and organization operations profile:

The company should describe its industry sector as well as its business type. The company could be a retailer, distributor, manufacturer, servicing agent, etc., where each one of these has its unique compliance issues and varying risk factors. For example, If the firm is servicing things, it did not export, it must have a procedure in place to guarantee that the equipment was sent legally. Add to that the company should have a clear structure where this can enhance the oversight and communication during the export process. A strong structure promotes organizations in resolving issues as they emerge and in preventing unlawful exports.

Compliance officers will need to examine their business' current needs and seek enough resources to keep them compliant. Purchasing software, attending training sessions, and recruiting new employees are all expenses that must be recognized and justified. A compliance official will not be able to fulfill the essential activities to keep their compliance program functioning if they do not have enough resources.

Export compliance officers must develop a strategy for building bridges and establishing open channels of communication. Meetings or management training might help bring people together to talk about their problems. Sending out emails and broadcasts on a frequent basis to keep active engagement might aid in improving corporate communication.

Possible Business activity and organization operations vulnerabilities:

- Unclear roles and responsibilities
- Lack of trained employees
- Unaware of dual-use risks
- Insufficient allocation of resources
- Conflict of interest problems
- Absence of compliance culture
- Absence of management oversight and accountability
- Lack of communication between employees

Products profile:

The classification of a company's products is a crucial choice that is governed by EU Dual-use regulations. It must first specify its potential exports, such as commodities, software, technical data, servicing, and so on. It should also incorporate a decision-making procedure for identifying the proper export license. The procedure for deciding dual-use classification and license should be documented.

Possible products vulnerabilities:

- lack of expertise for item classification
- unaware of dual-use risks
- failure in determining appropriate authorization
- Not keeping pace with new EU regulations

End-user profile:

As an exporter, the firm is responsible for understanding its end-user and completing the export procedure with the required mitigation measures and permissions. It should define its clients if they are a military entity, manufacturer, bank, civilian consumer, government entity, etc. It should incorporate tools in its operations that check the legality of its end-users and transactions. It will need to include a variety of compliance procedures in its compliance program to handle risk factors associated with various end-user interactions.

Possible end-user vulnerabilities:

- Weak compliance screening of customers
- Absence of processes that guarantee that clients get and understand licensing terms and obligations.
- Unaware of end-user restrictions
- Not keeping pace with new sanctions and embargoes
- self-blinding of some customers information
- unawareness of license requirement

End-use profile:

As an exporter, the company is responsible for checking the end-use of its products and they are not used in the application that could violate human rights. It should incorporate processes in its compliance program that check the legitimacy of the specified end-use and that the end-user makes good financial sense. The company should know the purpose of using these products, which will be used as capital equipment, for resale to retail customers, for servicing, for manufacturing other products, etc. The company should know if the item is used for the development, production, or maintenance of military items or any of the mass distraction weapons. In end, it's necessary to obtain a declaration of end-use statement that forced the end-user to use the goods in a proper way that could not violate human rights and international humanitarian law.

Possible end-use vulnerabilities:

- Lack of information about end-user
- Absence of convenient screening procedure

- Lack of information about company's products
- Absence of end-use statements

Bank and financial profile:

The company must check the bank which it will deal with. Many banks are subjected to financial restrictions, and this could affect the reputation of the company in case it deals with sanctioned ones. The company should try to avoid

interest where at some points it should separate the sources of salary and evaluations from the business that they monitor.

Possible financial vulnerabilities:

- Conflict of interest problems
- Lack of information about the financial process
- Not keeping pace with new restrictions
- Absence of safeguards in financial process
- Lack of oversight and accountability

Order processing and shipping profile:

Different export scenarios come with a variety of risk elements. The company should guarantee that these factors are considered when documenting processes for its compliance program. The company should specify how to export the product; is it in person, fax, phone, internet, mail, or by the freight forwarder. It should identify the routes that will be passed and the location where the order will be received as well. It should consider the approval procedure that will be used to guarantee that all compliance measures are completed prior to shipping. It's critical to establish precise export clearance protocols for shipping departments to follow, as well as effective hold/release procedures.

Possible order processing vulnerabilities:

- Insufficient information for transaction analysis
- Absence of oversight and accountability throughout the process
- Lack of knowledge about export documentation
- Insufficient information about export procedures

- The unusual or unknown shipping route
- Unusual requests concerning labeling or shipment of goods

4 Internal Compliance Program

4.1 Description of ICP

An Internal Compliance Program outlines the internal controls necessary to ensure that trade control rules and regulations are followed. It acts as an internal document, outlining internal protocols and processes as well as terms and conditions including, for example, due diligence for dealing with all risks associated with the export of goods to end-users and end-uses. A well-thought-out ICP will improve policy and its execution across all areas of a corporation.

An ICP must always be adjusted to the specific needs of an organization. Because a company's export control policy is dependent on a range of criteria, a customized strategy is required. These factors include the company's size, the goods manufactured, and the market in which it operates. A research organization must undertake an initial risk assessment by assessing the following factors when determining if and to what degree it is worried by dual-use export regulations:

- The subjects of its activities including field and/or research areas in which the company is active
- The number of international partnerships and foreign participants, as well as the nature and extent of these activities, which include field research, online and distance learning.
- The current condition of institutional rules and procedures, including the kind of organization structure, security risk mitigation mechanisms, and the majority of employee attitudes

These parameters must be evaluated against the EU's and individual countries' export control legislation. A research organization's unique dual-use risk profile will be determined at the end of this initial risk assessment. Every business needs an ICP that should be tailored to its specific requirements. The extent of an organization's export and re-export activities, as well as its business circumstances, should be reflected in its ICP. The scale of a company, its business and end-user geographic locations, the end-use and sensitivity of its goods, export volume, and the complexity of internal export procedures are all factors to consider. the relationships with business partners and product restrictions will all have an impact on how an organization structures build its ICP.

The activities of company will determine how it should establish its compliance program. Its exports, on the other hand, must adhere to EU laws. The seven key aspects specified by Commission recommendations (EU) 2021/1700 are as follows [27]:

- 1) Top-level management commitment to compliance
- 2) Organization structure, responsibilities, and resources
- 3) Training and awareness-raising
- 4) Export screening process and procedures
- 5) Performance review, audits, reporting, and corrective actions
- 6) Recordkeeping and documentation
- 7) Physical and information security

4.2 Core Elements

4.2.1 Management Commitment

Management commitment to export compliance is the most important aspect of an effective export compliance program. The management of an organization must be dedicated to designing and implementing a successful "best practice" export compliance program.

A company's senior management is responsible for promoting and ensuring compliance with relevant regulations. Its purpose is to create or establish an organizational culture that supports dual-use export control imperatives while also promoting the validity of compliance processes. The company's export control duties, including the risks associated and the necessity of following the laws and regulations, must be actively promoted by the management team who is responsible as well for raising awareness in the company.

The commitment of management must be integrated into every area of the ICP, and management must remain engaged and transparent in this aspect, understanding that export compliance is a top-down process. Senior management must ensure that sufficient resources including budget, appropriate training, and high-profile support are provided to the ICP. In addition to that participating in monthly meetings discussing changes that are needed,

enhancements, deficiencies, etc. could be a good review to ensure that the company is compliant with export EU and national dual-use export control laws and regulations.

Having a commitment statement declaring that all staff members participating in the export process must comply with all EU and national dual-use export control rules and regulations is vital. All employees involved in the export process should be given a written, official statement of policy at least once a year, or whenever personnel, management, or regulatory changes required, and it should be included in the ICP manual. This statement should be conveyed to all employees in the organization in general, but it must be submitted to and signed by all employees who are involved in the export process directly or indirectly.

The management commitment statement should include the following:

- 1) An introductory paragraph includes:
 - affirmation of the company's commitment to export compliance, as well as the deployment of sufficient resources to that aim.
 - Regulations, laws, regimes, and legislations that should be followed
 - Employees' commitment to be aware of and comply with export regulations.
 - Applying due diligence checks and measures for complying with export control laws and regulations
 - Applying for a license when needed
- 2) Dual-use statement
- 3) Penalty statement
- 4) Reference and signature statement

4.2.2 Training

One of the most important aspects of a company's export management and internal compliance program is training, which should be adapted to the specific situation of a research organization. Because export control requirements are always changing, as are goods and their end-uses, organizations must incorporate a training component in their internal compliance program. It's the first step toward ensuring that all employees are aware of security issues and can carry out their responsibilities under export control legislation and the organization's ICP.

Export compliance responsibilities should be understood by all employees participating in export-related tasks, including top management, consultants, contractors, sales representative

and even interns. Companies should give appropriate training to these employees so that they are familiar with export EU and national dual-use export control laws and regulations.

Responsibilities, processes, obligations, and penalties should all be included in training where companies might consider prioritizing compliance training in high-risk sectors.

When developing a training program to support an export compliance program, a company should consider the following factors.:

1. Who will be responsible for guaranteeing that export compliance training is carried out?
2. Who will be responsible for export compliance training?
3. What sorts of training should be offered?
4. Who should be trained?
5. How often will the company offer and/or request training?
6. How will the training be documented?
7. How will training records be preserved?
8. What strategies will be employed to maintain training materials up to date and relevant?

Monitoring of Export compliance training:

Depending on the size of the company, it must consider a person(s) as Export Compliance Officer who would be in a great position to assess the company's training needs regularly, to establish the best place for acquiring that training, and to guarantee that the essential training is completed. Whether the training is qualified by internal compliance personnel or an external one, the company must ensure that the staff is trained well in areas as export operations, auditing, security, and ethics side.

Training to be provided:

The person(s) in charge of the company's overall export compliance training program should set a schedule for educating all employees involved in the export process, whether directly or indirectly. The frequency of training will be determined by a variety of factors, including the complexity of its export operations the company's size, employee turnover, and goods type, as well as the legislation and policies that govern them. It is suggested that a schedule be created for training new employees as well as professional development training and continuous education for existing employees. This will enhance the export compliance knowledge of employees and

help them in being updated on all new laws and legislations that EU commission issues. Thus, on how to use these regulations and apply them to new product lines for export.

Training should highlight many points including:

- Dual-use and Military Trade Controls
- Reading, understanding, and use of EU regulations
- Dual-use and Customs Classification
- Customs regulation and controls
- Export authorization process
- The "red flags" that indicate possible export infringement
- Consequences of illegal actions
- Identification of high-risk areas
- Recordkeeping procedures
- Auditing procedures

Training Documentation:

Training records enable a company to identify the who have received training sessions. These documents can be good evidence that demonstrates that the company's needs have been met and that employees have received the export compliance training sessions and are aware of their role responsibilities. For each training event, it is recommended that a training record be kept, including the date and place of the training, the name of the trainer(s) or organization/institute, the topics covered, and the names of the employees that have participated.

4.2.3 Organizational Structure

Because each research organization is different, there is no single method to design compliance procedures and assign duties. However, adopting a well-defined set of export compliance procedures and responsibilities may assist the company in attaining its compliance goals and enhancing its overall management mode.

If the company's size permits, it's critical to maintain a clear separation of duties to avoid conflicts of interest. Larger corporations can designate one employee per department or unit as the point of contact for export control issues. Regardless of how this is set up, it is critical to ensure that each element of the business can assure effective compliance.

The company must provide a detailed explanation of its organizational structure in its ICP, such as in the form of an organizational chart, with a clear division of roles. It should also include the names, responsibilities, and contact information of the personnel in charge of export control and compliance.

The following are the proposed teams that could contribute to the export process:

Export compliance officer: He will be responsible for approving all export transactions at the end. This official is responsible for maintaining tight control over all departments engaged in exporting a product. He must ensure that the decisions taken regarding dual-use item classification and authorization are in compliance with EU dual-use regulations.

Classification engineers: These employees will be responsible for classifying company items. These individuals collaborate with the Export compliance officer to identify if the item or software produced is a dual-use item. These employees are the technical experts of the company who have the technical expertise that will help in item classification.

Export legal Counsel: A lawyer(s) whose job is to provide legal export guidance and can deal with the customs in case of missing of documents or in case of violation inside the company or during the export process.

ICP unit: these employees will be in coordination with the export compliance officer as they can help him in reviewing and ensuring that export of goods is in compliance with EU dual-use regulation as well as they are responsible for auditing, recordkeeping, and documentation.

Transaction screening team: employees who, in collaboration with the salesman, will be responsible for destination screening and license requirements. The salesperson can rapidly determine whether the person, business, or entity is subject to EU sanctions and if a license is necessary. This team is responsible for managing credit checks, order receipt, request for quotes, bank and finance processes checks, etc.

Every company has its organizational structure, so it is hard to obtain a unique one. The CEO must guarantee that enough resources are allocated to the ICP, taking into consideration the

necessary legal and technological expertise and abilities. The following flow charts are an example of the flow chart for small/medium companies and large companies.

For small/medium companies:

For these companies, usually, the ICP team with dual-use item classification and transaction screening team will be external. There will be coordination with the technical experts of the company as they have the technical expertise that can help in item classification. Another point of contact will be the company's sales and procurement team, who will be able to provide the ICP team with information regarding the dual-use item's export destination.

Legal counsel in addition to his duties with respect to customs clearance, he may have contact with the ICP team in case they are responsible for auditing and recordkeeping. ECO will have the total responsibility in enhancing the communication between internal and external employees as well as he will be responsible of approving all export transactions at end.

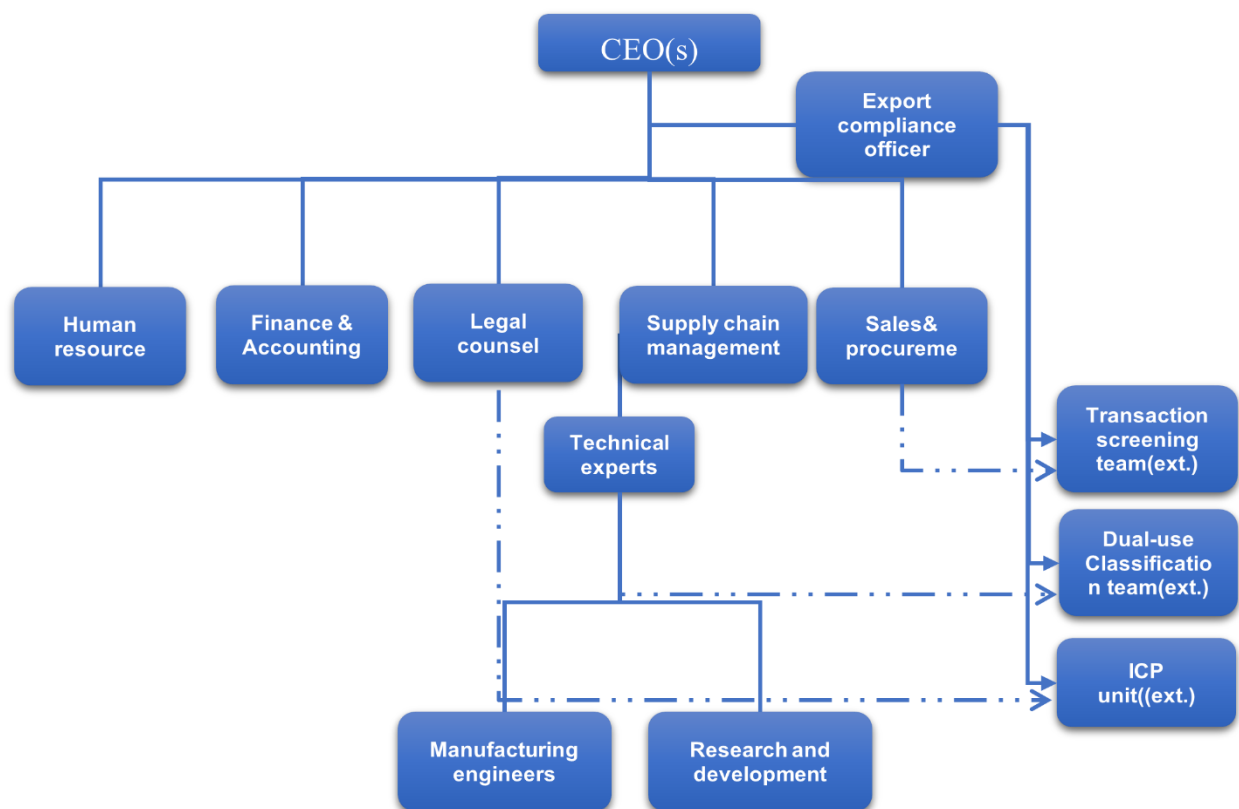


Figure 5 Organization structure of Small/Medium companies

For large companies:

For these companies, usually, the ICP team is part of the company organization. In larger companies where the ICP team is internal, the CEO must guarantee that there is a clear separation of interests. Export compliance employees should be assigned wisely within the organization to avoid any conflicts of interest. Their sources of salary and evaluations should be independent of the process they are controlling. Similarly, to enforce export compliance in the face of other potentially competing business pressures, employees involved in export process must be placed at the proper levels in the organizational structure.

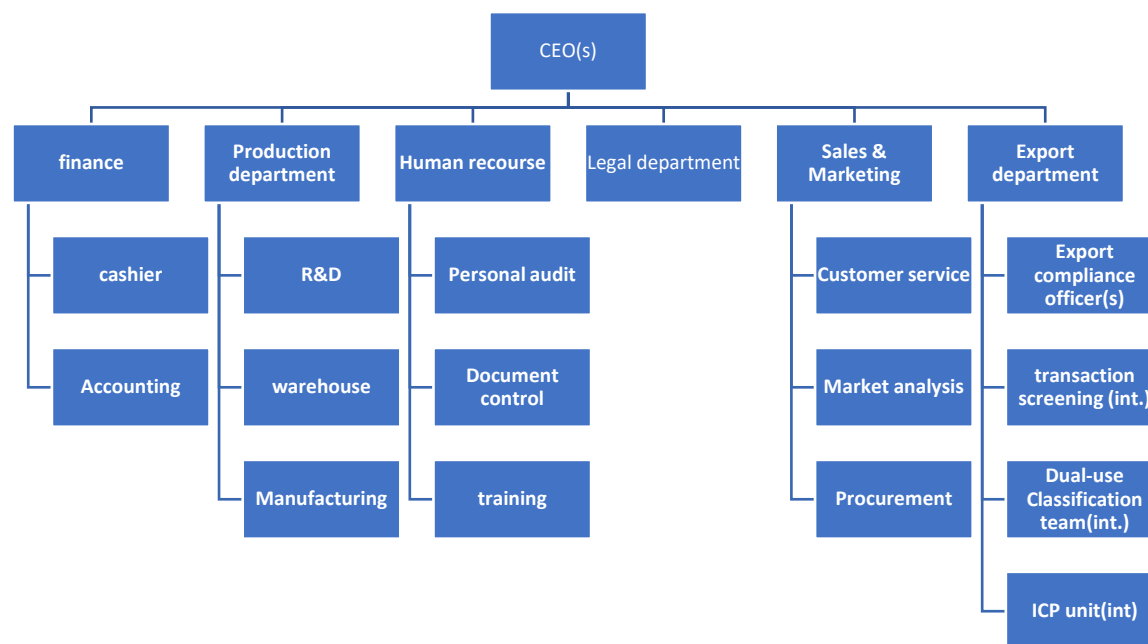


Figure 6 Organizational structure of large companies

4.2.4 Export screening process and procedures:

The company's ICP officer with involved employees are responsible for designing and implementing a system that gathers and classifies items, assesses the activity's risk, determines if an authorization is necessary, controls post-licensing, and allows for the screening of parties throughout the entire export process. This section consists of internal controls that the organization should put in place to guarantee that no "export" occurs without the necessary authorization or in violation of any applicable export restriction and EU dual-use regulations.

4.2.4.1 Item Classification

All compliant companies are aware of their legal duties under European and national law. This means that companies can classify items and determine whether they require an authorization on their own or not. This classification applies not just to items, but also to technology and software, for example. Compliant companies are also aware of when sanctions are in effect, which destinations are classified as sensitive, and where to locate the appropriate laws and regulations.

Military items are usually distinguished from dual-use items. Military products are commodities (such as equipment, materials, systems, technology, components, or software) that are created or adapted specifically for military purposes. Military products are listed in the European Union's Common Military List as well as national lists in the EU Member States. Unlike the EU's dual-use export control regime, military export control is administered by each EU Member State. These EU dual-use goods are listed under Annex I for export to third countries and under Annex VI for intra-union transfer.

The export screening process must determine whether a non-listed dual-use item may be utilized in conjunction with the sensitive end-uses indicated in Article 4 of Regulation (EU) 2021/821 [17]:

“Where an exporter is aware that dual-use items which he proposes to export, not listed in Annex I, are intended, in their entirety or in part, for any of the uses referred to in paragraph 1 of this Article, the exporter shall notify the competent authority. That competent authority shall decide whether or not to make the export concerned subject to authorisation.”

How to classify items:

A classification number is assigned to each dual-use item. This is a mixture of numbers and letters (which includes the Category, Subcategory, and regime) that is required for item classification and authorization documentation. The classification number is not generated at random; it refers to the type of the item as well as the source of export control under the relevant export control system [27].

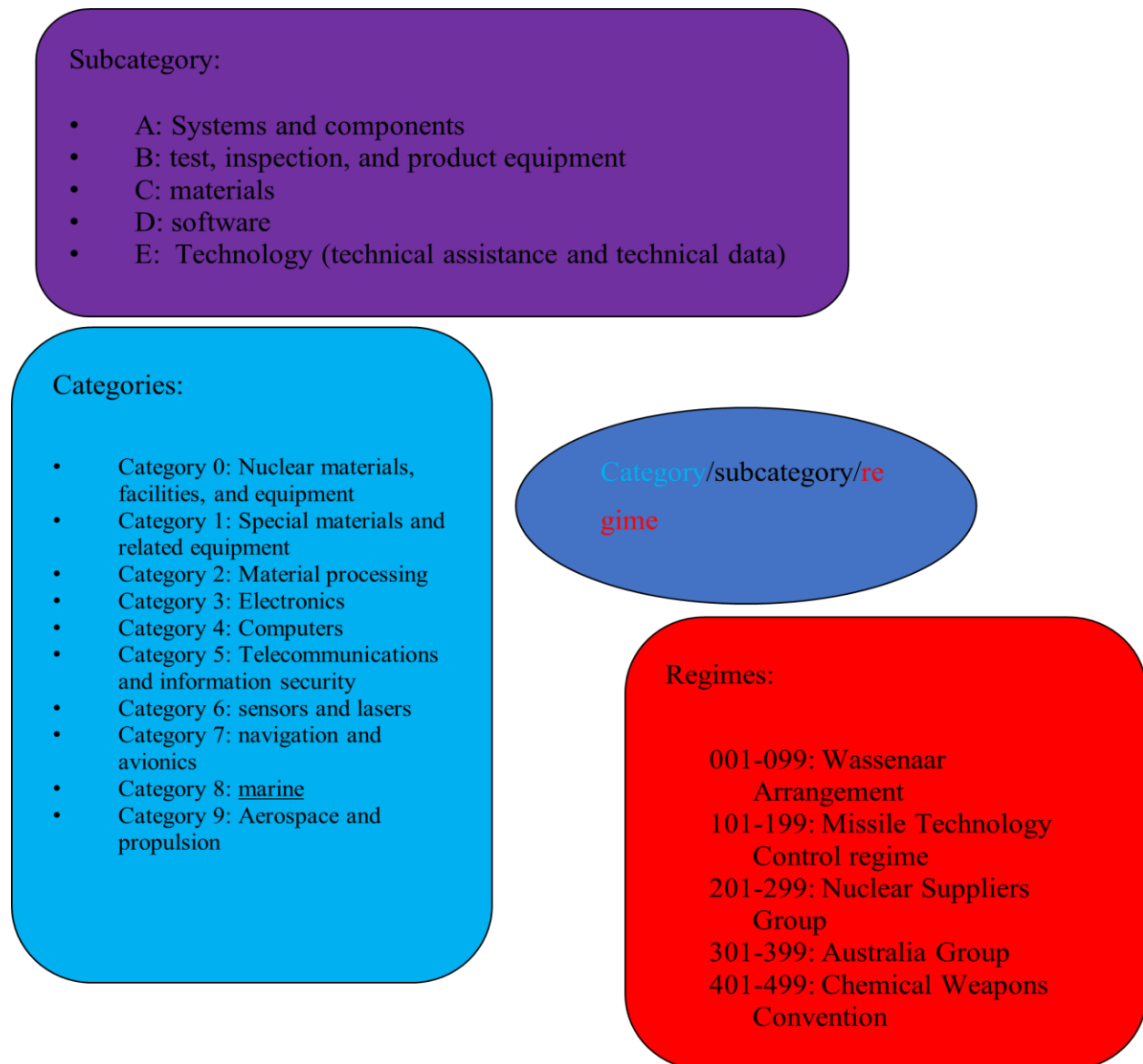


Figure 7 Classification of Dual-use items

4.2.4.2 Screening consignees, end-users, and end-use / Transaction risk assessment

The export screening procedure is the sensitive part of the compliance program as it controls the risky parts the company could face. The company should include in its ICP how it screens consignees, end-users, and other parties involved, as well as how it guarantees that no items are delivered to sanctioned parties or parties associated with risks (such as brokering of items).

By analyzing the EU consolidated list of sanctions or the national list, the company must guarantee that none of the parties involved in a project or sensitive activity are subject to restrictive measures (sanctions and embargoes). The EU sanctions map might be a useful tool for supporting a research team in finding relevant EU restrictions [28].

The end-user must be known for all transactions. The fundamental goal of export control is to keep items from being utilized for inappropriate reasons such as proliferation or human rights violations. Companies that follow the rules have measures in place to prevent items from being used for reasons other than the specified end-use. To some extent, having an end-use statement signed by the end-user helps mitigate risks.

Under Article 12(4) of Regulation (EU) 2021/821 [17]:

“Individual export authorisations shall be subject to an end-use statement. The competent authority may exempt certain applications from the obligation of providing an end-use statement. Global export authorisations may be subject to an end-use statement if appropriate.”

4.2.4.3 License determination and application, including for controlled brokering, transfer, and transit activities

The activity's item classification and risk assessment may suggest that an authorization is necessary. Companies must be aware that the exporting item may be subject to these licensing requirements and should be aware of the conditions under which this may apply.

The company must know the various licensing categories (including individual, global, and general licenses) and restricted operations (brokering, transit, export, and transfer), as well as the license application processes for EU and national dual-use export restrictions. Other operations, such as technical assistance, must adhere to national dual-use export control requirements. Because products, EU regulations, and sanctions change over time, someone, often the ICP export compliance officer, is responsible for reviewing EU law and legislation.

4.2.4.4 Post-licensing, including shipment control and compliance with the conditions of the authorization

A final check should be undertaken before shipping or transmitting a restricted item to confirm that all compliance steps have been completed. This is an ideal time to double-check that goods have been correctly classified, red flags have been confirmed, entity screening has been completed, and the shipment has a valid authorization. Be mindful that applicable legislation may have changed in the interim and goods may be then considering as dual-use item and an authorization may be needed.

The firm must determine if the license's terms and conditions have been satisfied and be aware that a license may restrict the transfer of technology and software to just certain end-users. Even the information related to the end-user as name, address, and legal status have to be checked before shipment in case any changes could affect the validity of the company's license.

4.2.5 Performance review, audits, reporting, and corrective actions:

Every compliance program should be audited on a regular basis to detect omissions and operational failures and to revise policies and procedures in light of new regulations, legal requirements, and best practices. Formal auditing of all aspects of a company's compliance program is the best approach to measure the efficacy of its compliance initiatives. Audits

evaluate every element in the export process to ensure that exports are compatible with EU regulations and foreign policy interests, as well as the company's best interests.

Auditing experience:

It's important to have trained employees who can do auditing in a well-manner. Add to that, conflict of interest can hinder the job of auditor(s) in detecting possible areas of risk. The auditor(s) should have total freedom and flexibility to make suggestions that could enhance the compliance program of the company and assess and mitigate risks and vulnerabilities.

In a company's ICP, annual audit employee training should be a key priority. Auditing concepts, processes, and procedures, as well as explanations of EU export rules and regulations, should be well informed by the auditors. Add to that, an auditing of the authorization process and requirements should be a priority to be considered as well.

Corporate audits:

Each program office or business unit should have its own internal evaluation system in place to guarantee that the company's export management and compliance policies and procedures are followed. These audits should focus on export compliance procedures and transactions as well. It may include the following:

- Revision of management commitment
- Revision of training and education programs
- Revision of classification of company goods
- Revision of export authorization process
- Revision of screening process
- Revision of the order processing system
- Revision of recordkeeping practices
- Revision of foreign travel process checklists, including hand-carried items such as laptop
- Revision of visits and travels of employees

Illegal Actions:

The company should establish procedures for whistleblowers and escalation to guide employees' actions in the event of a suspected or proven infringement. Any claimed infractions of national

and EU dual-use export control legislation, as well as the corrective actions, are taken, should be documented. If an audit reveals a possible violation of export control rules or techniques, the firm should take an action against this violation that could lead to termination of employment contract and even imprisonment in some cases.

Corrective Action and adapting Procedures for Audits:

Company should incorporate suitable processes, practices and procedures for audits, performance review and reporting in its export compliance programs. It is important that the company report its findings with the relevant executives, including any changes to processes and corrective actions. Following the implementation of corrective actions, it is advised that the ICP's policies and procedures be adjusted if needed and that the changes be communicated across the organization.

4.2.6 Recordkeeping and documentation:

For a company compliance effort, proportionate, precise, and trackable recording of dual-use export control-related activities is critical. Records management must be integrated into firm business operations as a crucial component supporting the company's objective to be effective. Companies require a well-coordinated, company-wide plan to encourage the successful management of their assets.

Under article 27 of Regulation (EU) 2021/821 [17]:

“Exporters of dual-use items shall keep detailed registers or records of their exports, in accordance with the national law or practice in force in the Member State concerned. Such registers or records shall include in particular commercial documents such as invoices, manifests and transport and other dispatch documents containing sufficient information to allow the following to be identified:”

- a) Dual-use item description
- b) Quantity of dual-use item
- c) Name and address of the exporter and consignee
- d) End-user and end-use of the dual-use item

To preserve export-related records, the company can use manual file systems, database management software or web-based systems, or any combination of the three. A corporation must be able to retrieve needed papers regardless of the filing system employed. It must guarantee that export control-related papers are kept consistently and can be quickly made available for inspections or audits by its government or other external parties.

Under article 27 of Regulation (EU) 2021/821, the registers, records, and documents article 27 must be kept for at least five years for exporting outside EU territory and 3 years for intra-union transfers [17].

Paragraph 3 states that:

“The registers or records and the documents referred to in paragraphs 1 and 2 shall be kept for at least five years from the end of the calendar year in which the export took place or the brokering services or technical assistance were provided. They shall be produced, on request, to the competent authority.”

Paragraph 4 states that:

“Documents and records of intra-Union transfers of dual-use items listed in Annex I shall be kept for at least three years from the end of the calendar year in which a transfer took place and shall be produced, on request, to the competent authority of the Member State from which these items were transferred.”

4.2.7 Physical and information security

Physical and information security is a set of internal policies and procedures designed to prevent employees, contractors, partners, and visitors from removing or accessing dual-use assets without authorization. These policies and procedures are considered important and useful internal security measures for monitoring and controlling the company’s data and intangible technology transfers as well.

Having adequate security measures in place to prevent unauthorized access to or removal of regulated dual-use products may be utilized to accomplish a variety of goals. Starting from Monitoring and safeguarding of controlled dual-use items that could be essential parts to ensure

compliance with export controls and regulations to limiting the access to specific data in the company and sensitive locations. A company can build a set of internal processes for recognizing and managing risks in an integrated way, covering both physical and information security as well as export control issues, to secure projects involving dual-use or other security-relevant products.

The company should encourage its employees to report in case they identify any violation. It should be included in employee performance goals and assessments, with the expectation that workers will raise concerns if they notice a possible threat. The employees must know well the rules, laws and legislations and abide with them. In addition to that, they should notify the export compliance manager in case if they suspect another employee is doing, or going to do, an action that could violate the EU dual-use regulations.

For physical security:

Controlled dual-use items must be protected from illegal removal, access, or use by all employees, including trainers, visiting scientific staff, and external collaborators. Physical security of the items, the creation of limited access places, and limits on personnel admission and leave are all things to think about.

For information security:

For safe storage, access to dual-use software or technology should be limited to specific employees. the company must implement file encryption, antivirus scans, audit trails and logs, user access control, and firewalls, among other regulations and processes.

5 Case study: TOOLSIFY Spa

Practical knowledge can often lead to a deeper understanding of the concept of ICP and controls of goods. This study was carried out inside a manufacturing company to understand how ICP can be implemented. It has been conducted also to identify the procedures for the export screening process and classification of the products.

The manufacturing company is called **TOOLSIFY Spa** which is, with over 60 years of experience in the high precision tools industry, one of the leading companies in the production of taps, thread mills, hobs, punching tools and dies. Exporting these items outside Italian territory requires control, especially to countries subjected to an arms embargo. The company's export control duties including the necessity of following the laws and regulations must be actively promoted throughout its internal export control program.

5.1 Products of TOOLSIFY Spa

Taps:

Taps are tools that are used to make screw threads. A tap creates a female surface that operates like a nut by cutting or forming a thread on the inner surface of a hole. Hand taps, machine cutting taps, and shaping taps are all available. TOOLSIFY Spa company manufactures high-performance taps to meet the most demanding production requirements, as well as tapping solutions for nearly any sort of generic application.



Figure 8 Taps

Thread mills:

Thread mills are milling tools that are used to cut threads. Thread mills are utilized on NC machining centers with simultaneous triaxle control and helical interpolation features. The capability to manufacture threads with good shape, finish, and dimensional precision is one of the thread mill's major benefits. It can eliminate the possibility of tap breakage and its repercussions, allowing for full-bottom threading and exact thread depth control.

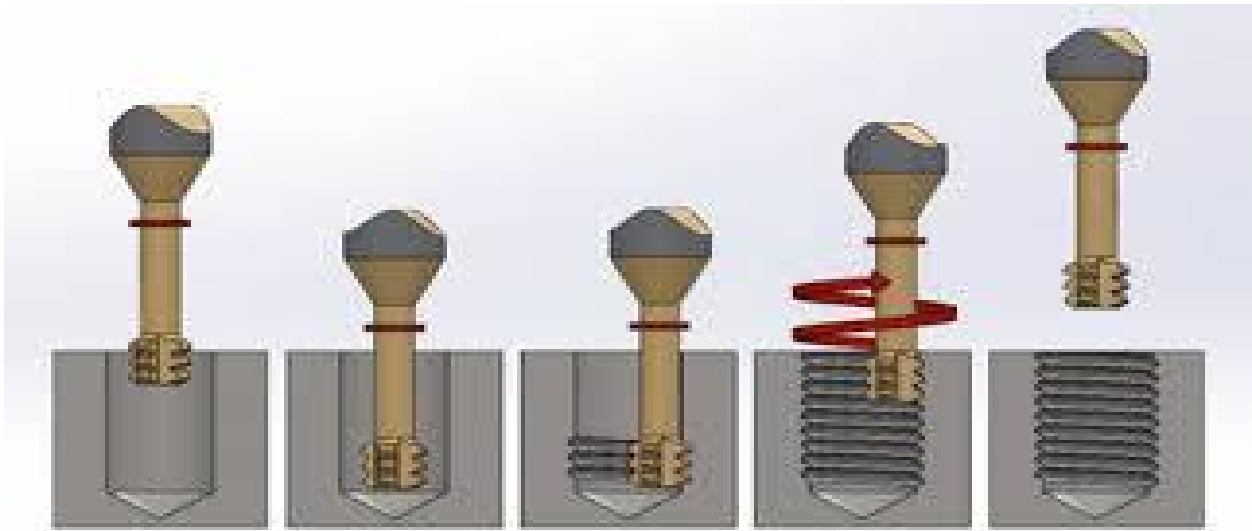


Figure 9 Thread Mills

Hobs:

A hob is a cutting tool that is used to cut teeth into a workpiece. It has helical cutting teeth and is cylindrical in form. These teeth feature grooves that span the length of the hob and help in chip removal and cutting. TOOLSIFY Spa company manufactures two kinds of hobs one called HSSE-PM hobs that permits for greater feed rates and cutting speeds higher than 200 m/min and the other is a solid carbide hob that is used for cutting speeds higher than 350-400m/min.



Figure 10 Hobs

Punches:

Sheet metal punching is a cutting operation that uses a punch press to remove material from a piece of sheet metal by generating a proper shearing force. Punching is used to generate holes and cuttings of various shapes and sizes in a broad variety of materials that come in sheet form using CNC Punching. TOOLSIFY Spa company manufactures a variety of punches tools and their dies include: Jektol punches, regular pilots, regular punches, positive pick-up pilots



Figure 11 Punches Tools

5.2 Top-level management commitment to compliance

TOOLSIFY Spa company is adopting a corporate culture that supports dual-use export controls. Its values rely on transparency and correct management conduct. **TOOLSIFY Spa** Company's export control duties are to raise awareness among its employees and promote a culture of compliance with the laws and regulations. Starting with a commitment statement -shown below- that should be developed and signed by all company's employees involved in the export process for declaring that all employees must comply with all EU and national dual-use export control rules.

Management policy statement:



Date:

To: All Employees

From: Name: president/Chairman ...

Subject: Export Control Compliance

In support of the international security obligations, European Union's (EU) and Member States' security goals, and non-proliferation commitments such as the export control regimes, European Security Strategy, the Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention, the Biological Weapons Convention, and UN Security Council Resolution 1540, as well as this company's legal responsibilities and business interests, **TOOLSIFY Spa** has implemented export control procedures that all company employees are required to follow.

All employees participating in export and associated responsibilities must follow the export control standards, policies, and procedures described in the internal Compliance Program Manual of the **TOOLSIFY Spa**. Employees with export-related work tasks, in particular, must use due diligence to ensure that no transactions are performed in violation of EU and national dual-use export control rules and regulations.

Licensing criteria and requirements should be standardized whenever possible to minimize market distortions and to guarantee that restrictions are applied consistently and effectively throughout the Union's customs area.

Some of **TOOLSIFY Spa** goods are controlled by EU regulation and compliance with these regulations is mandatory, not voluntary. Employees of **TOOLSIFY Spa** do not have the power to act in violation of this policy, nor the ability to direct, authorize, or support violations of the policy by others.

Because export noncompliance is highly costly, our company must verify that all dual-use items that are exported use the necessary export authorization. Failure to comply with these regulations can result in termination of the contract, imposition of penalties, fines, and even imprisonment.

Any questions about company policy, the legality of any transaction, or any violations of EU export control laws and regulations should be sent to the (Name, Title, and phone number).

The [RESPONSIBLE OFFICIAL] is responsible for publishing this statement across the divisions and offices involved in the export process.

_____(signature) _____(DATE) _____(CEO/ ECO)

Employees of **TOOLSIFY Spa** must annually read and sign the following verification statement and submit it to the Human Resources office for inclusion in your personnel file.

I, _____, acknowledge receipt of **TOOLSIFY Spa** Policy statement dated (DD/MM/YY) and signed by (>>>>>>) on **TOOLSIFY Spa** commitment to export control compliance on (DD/MM/YY).

I have read and agree to follow **TOOLSIFY Spa** export compliance standards and procedures to assist the company in complying.

_____(Signature) _____(DATE)

5.3 Organizational structure

TOOLSIFY Spa has about 170 employees where each phase of the production is cycle carried out inside the company. The organizational structure of **TOOLSIFY Spa** supports productivity and a positive working atmosphere, as well as allowing teams to collaborate and work effectively together. It is based on bureaucratic processes, with clear lines of authority running through all levels of administration. The Company organizes each department by its activities including sales and marketing, accounting and finance, human recourse, legal supports, manufacturing, and warehouse shown in Figure 12.

Many significant decisions could be faced during the export control process that could expose the company and its employees to significant repercussions. The company has contracted with external consultants to conduct an evaluation of the export screening process and item classification. This external team has an important role in supporting activities that a company finds challenging to perform internally.

To facilitate the work of the external consultant, it is necessary to have good coordination between internal and external employees. The company's Export Compliance officer has the responsibility for this coordination bridge that has been built with the external consultants to control the export of company products. He is authorized to approve all export transactions at the end.

The company's technical experts in the production department help the external classification team and provide them with the needed data to classify our goods. The Transaction screening team is also an external that is in contact with the company sales department team for providing the information regarding the export destinations of the items. The export legal counsel interferes in the process and is responsible for all customs documents and is in contact with the external consultant in case of any risk or illegal decision faced. Audits and recordkeeping are crucial elements for the internal compliance program, and they are implemented inside the company with the help of the external ICP unit team.

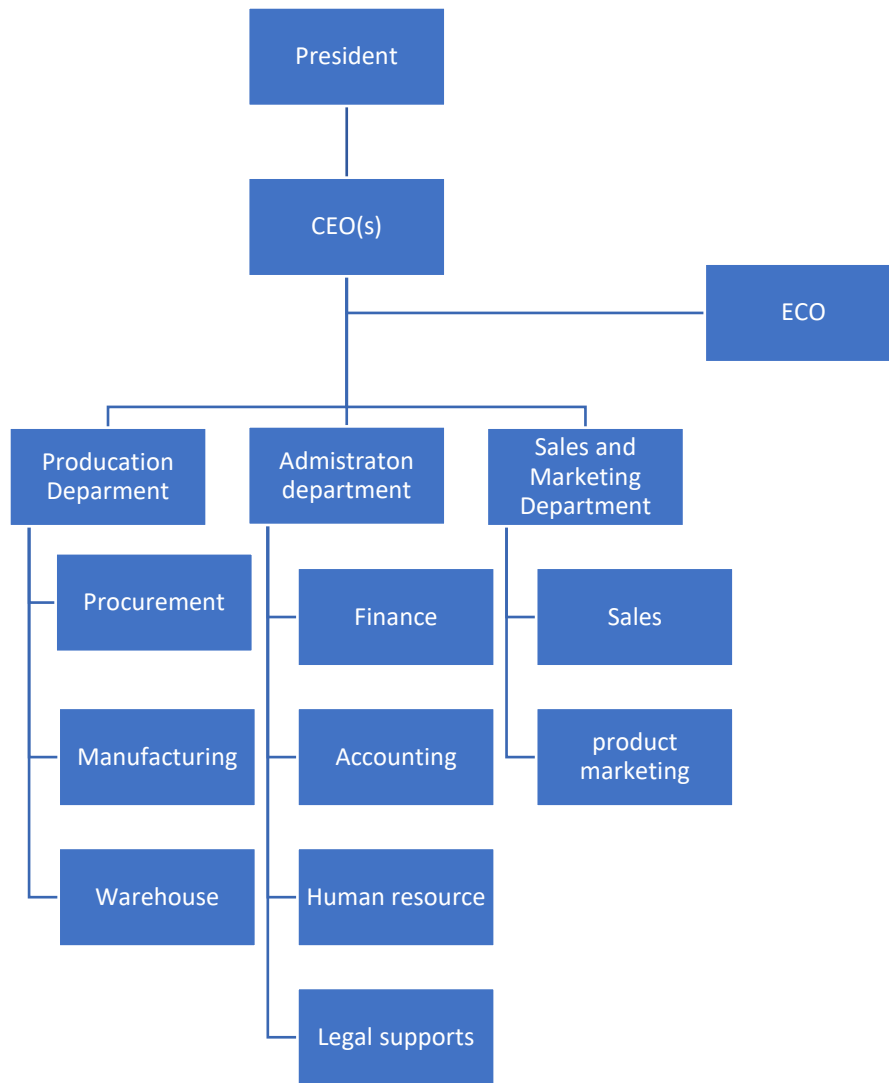


Figure 12 Organizational Structure of Toolsify Spa

5.4 TOOLSIFY Spa export screening process

The screening system is one of the most challenging and risky elements of the ICP. Despite part of this screening system of the company being external, the ECO with involved employees has a crucial role in controlling the company's product. Figure 13 below gives a brief description of the flow of information internally and externally. Customs classification, Dual-use classification, authorizations check, and prior shipment check are the four important milestones to be analyzed

and achieved before ending the process and preparing the item for exportation. It is necessary to record the decisions internally in case the company wants to review the decisions taken before export. Export Screening Process

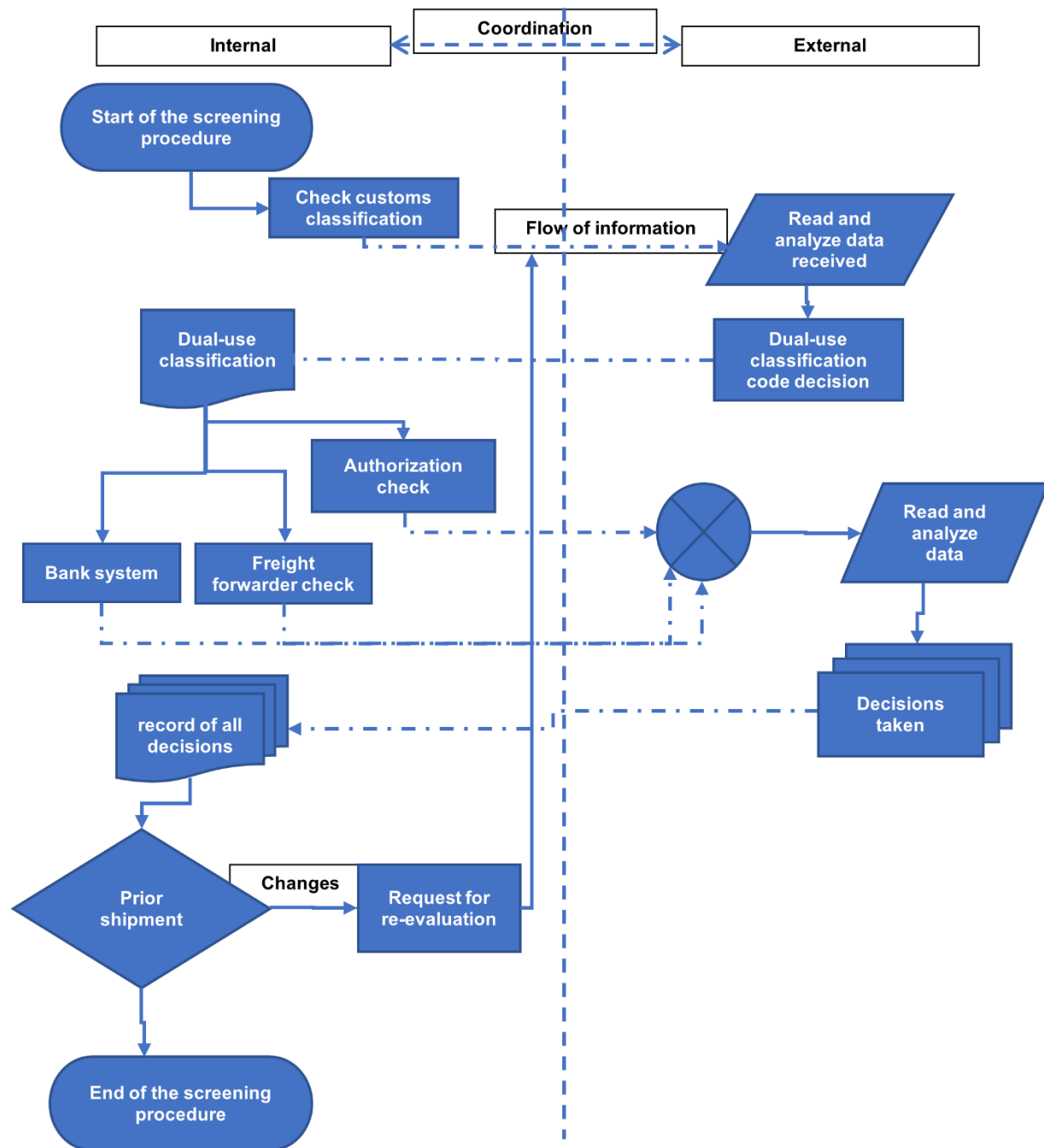


Figure 13 Export Screening Process

5.4.1 Item classification

One of the major parts of the screening procedure is item classification. Usually, the company must classify its products even if there is no export process. This classification is not just related to dual-use code but also to customs code. This customs tariff code is not just necessary for customs clearance but also can be used to determine if a company's products have a correlation with dual-use code. In case there is a correlation with a dual-use code, the company must analyze this correlation and determine if its product could fall within the description of this dual-use code.

If the CN code has no correlation with dual-use codes or even if there is a correlation but through analysis, it was found that there is no relation with the correlated dual-use code, this does not mean that the company's item is not dual-use, nor the analysis of item classification is finished. It is necessary to do another analysis that is related to the item description. Through this analysis, the company can check whether its products are listed or not within Annex I for export outside European territory or Annex VI for intra-union transfer. Item Classification Process

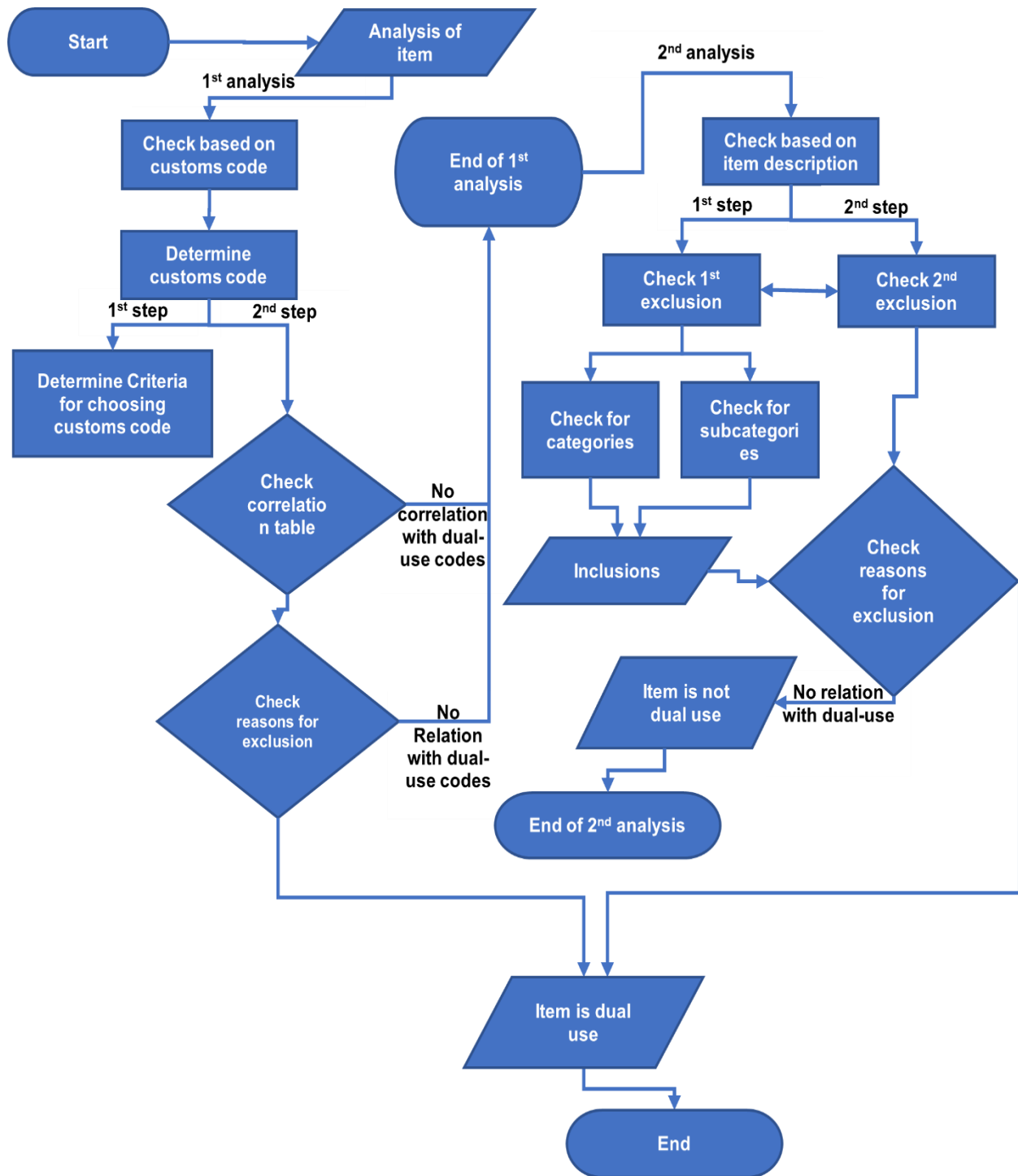


Figure 14 Item Classification Process

5.4.1.1 Customs Tariff code

Each of the products of TOOLSIFY Spa company has its customs tariff code. These codes are not just used to determine the customs duty rate but even they are necessary for applying for export authorization, detecting if export restrictions apply, obtaining a certificate of origin, and for other purposes. Table 1 below presents the customs tariff code for company's products that are determined using European Commission taxation and customs union databases [29].

Choosing these codes is not based on random choices, but every product was analyzed to determine its CN code. As shown below in Table 2, every CN code has the characteristics that differentiate it from the other codes.

Table 1 Customs Code of Toolsify Products

Product	Customs Tariff Code							
	Chapter		Entry		Subheading		Combined nomenclature	
	No.	Description	No.	Description	No.	Description	No.	Description
Taps	82	TOOLS, IMPLEMENTS, CUTLERY, SPOONS AND FORKS, OF BASE METAL; PARTS THEREOF OF BASE METAL	8207	Interchangeable tools for hand tools, whether or not power-operated, or for machine tools (for example, for pressing, stamping, punching, tapping, threading, drilling, boring, broaching, milling, turning or screw driving), including dies for drawing or extruding metal, and rock-drilling or earth-boring tools	820740	Tools for tapping or threading: For working metal:	82074010	Tools for tapping

Thread mills	82	TOOLS, IMPLEMENTS, CUTLERY, SPOONS AND FORKS, OF BASE METAL; PARTS THEREOF OF BASE METAL	8207	Interchangeable tools for hand tools, whether or not power-operated, or for machine tools (for example, for pressing, stamping, punching, tapping, threading, drilling, boring, broaching, milling, turning or screw driving), including dies for drawing or extruding metal, and rock-drilling or earth-boring tools:	820740	Tools for tapping or threading: For working metal:	82074030	Tools for threading
Hobs	82	TOOLS AND TOOLS; ARTICLES OF CUTLERY AND CUTLERY, OF COMMON METALS; PARTS OF THESE OBJECTS OF COMMON METALS	8207	Interchangeable tools for hand tools, including mechanical ones or for machine tools (for example: for drawing, stamping, punching, tapping, threading, drilling, boring, grooving, milling, turning, screwing) including dies for drawing or extruding metals, as well as drilling or probing tools	820790	Other interchangeable tools: with part operating in other matters:	82079050	Gear cutting tools
punches	82	TOOLS, IMPLEMENTS, CUTLERY, SPOONS AND FORKS, OF BASE METAL; PARTS THEREOF OF BASE METAL	8207	Interchangeable tools for hand tools, whether or not power-operated, or for machine tools (for example, for pressing, stamping, punching, tapping, threading, drilling, boring, broaching, milling, turning or screw driving), including dies for drawing or extruding metal, and rock-drilling or earth-boring tools	820730	Tools for pressing, stamping or punching:	8207301000	For working metals

Table 2 Criteria for Determining Customs Code

Criteria for determining customs code	Company CN codes			
	82074010	82074030	82079050	8207301000
Interchangeable Tools	Taps	Thread mills	hobs	Jektol punches, regular pilots, regular punches, positive pick-up pilots
Manufacturing processes	Tapping process	Threading process	Gear cutting process/ Hobbing process	Punching and stamping
Finished product	Threaded screws, bolts, nuts, and other components	Threaded screws, bolts, nuts, and other components	Cylindrical Gears, roller chain sprocket	Holes of different shapes and sizes
Machine tools used	Tapping machines	numerically controlled machining centers (NC)	CNC gear hobbing machines	CNC Punching machines

5.4.1.2 1st analysis of dual-use codes based on their correlation with CN codes

After determining the customs tariff code, it is important to check the correlation table between customs codes (Combined Nomenclature) and dual-use codes. This table helps in determining if the products of the company have a relation with dual-use codes based on their tariff code. It is not necessary to have a correlation, but in case there is, it is necessary to analyze the correlated dual-use codes and determine the reasons for exclusion.

Table 3 presents the dual-use codes that have a relation with TOOLSIFY Spa punches tools. This table is part of a long one published by the European Commission on 7 January 2022 and must be checked regularly due to updates [30]. As shown below in Table 3, the company's punches tools and their dies have no relation with the correlated dual-use codes which ends the first analysis of item classification.

Table 3 Correlation Table

CN Codes 2022	TARIC Footnote for SAD	Dual Use Codification
8207301000	DU013	0B005
8207301000	DU039	1B003
8207301000	DU142	2B204
8207301000	DU149	2B228
8207301000	DU298	7B103
8207301000	DU363	9B009
8207301000	DU366	9B115
8207301000	DU642	9B010

Table 4 Exclusion based on Correlation with Dual-use codes

Dual-use codification	Description based on regulation (EU) 2021/821. [17]	Reason of exclusion:
0B005	<p><i>Plant specially designed for the fabrication of "nuclear reactor" fuel elements and specially designed or prepared equipment therefor. <u>Technical Note:</u></i></p> <p><i>Specially designed or prepared equipment for the fabrication of "nuclear reactor" fuel elements includes equipment which:</i></p> <ol style="list-style-type: none"> 1. <i>Normally comes into direct contact with or directly processes or controls the production flow of nuclear materials</i> 2. <i>Seals the nuclear materials within the cladding;</i> 3. <i>Checks the integrity of the cladding or the seal;</i> 4. <i>Checks the finish treatment of the sealed fuel; or</i> 5. <i>Is used for assembling reactor elements.</i> 	Company's products are not specifically designed, modified, or intended to be used for development of nuclear applications.
1B003	<p><i>Tools, dies, moulds or fixtures, for "superplastic forming" or "diffusion bonding" titanium, aluminium or their alloys, specially designed for the manufacture of any of the following:</i></p> <ol style="list-style-type: none"> a. <i>Airframe or aerospace structures;</i> b. <i>"Aircraft" or aerospace engines; or</i> c. <i>Specially designed components for structures specified in 1B003.a. or for engines specified in 1B003.b</i> 	"Superplastic forming" (1 2) means a deformation process using heat for metals that are normally characterised by low values of elongation (less than 20 %) at the breaking point as determined at room temperature by conventional tensile strength testing, in order to achieve elongations during processing which are at least 2 times those values. [17]

		<p>"Diffusion bonding" (1 2 9) means a solid state joining of at least two separate pieces of metals into a single piece with a joint strength equivalent to that of the weakest material, wherein the principal mechanism is interdiffusion of atoms across the interface [17]</p> <p>These two processes are advanced manufacturing technologies that are difficult to produce using traditional forming techniques and cannot be done by company's product</p> <p>Company products are not specially designed for just aerospace, but also automotive, bolts, machine tools and mechanical components industries.</p>
2B204	<p><i>"Isostatic presses", other than those specified in 2B004 or 2B104, and related equipment, as follows:</i></p> <p>a. <i>"Isostatic presses" having both of the following characteristics:</i></p> <ol style="list-style-type: none"> 1. <i>Capable of achieving a maximum working pressure of 69 MPa or greater; <u>and</u></i> 2. <i>A chamber cavity with an inside diameter in excess of 152 mm;</i> <p>b. <i>Dies, moulds and controls, specially designed for "isostatic presses" specified in 2B204.a."</i></p>	<p>"Isostatic presses" (2) mean equipment capable of pressurising a closed cavity through various media (gas, liquid, solid particles, etc.) to create equal pressure in all directions within the cavity upon a workpiece or material. [17]</p> <p>Company's products are not designed for isostatic presses</p>
2B228	<p><i>"Rotor fabrication or assembly equipment, rotor straightening equipment, bellows-forming mandrels and dies, as follows:</i></p> <p>a. <i>Rotor assembly equipment for assembly of gas centrifuge rotor tube sections, baffles, and end caps;</i></p> <p>○ <i>Note: 2B228.a. includes precision mandrels, clamps, and shrink fit machines</i></p> <p>b. <i>Rotor straightening equipment for alignment of gas centrifuge rotor tube sections to a common axis</i></p> <p><u><i>Technical Note:</i></u></p> <p>○ <i>In 2B228.b. such equipment normally consists of precision measuring probes linked to a computer that subsequently controls the action of, for example, pneumatic rams used for aligning the rotor tube sections.</i></p> <p>c. <i>Bellows-forming mandrels and dies for producing single-convolution bellows.</i></p> <p><u><i>Technical Note:</i></u></p>	<p>Rotor fabrication or assembly equipment, rotor straightening bellows forming need tools other than company's one.</p> <p>Company's products have another manufacturing uses that differ from these mentioned.</p>

	<p><i>In 2B228.c. the bellows have all of the following characteristics:</i></p> <ol style="list-style-type: none"> <i>1. Inside diameter between 75 mm and 400 mm;</i> <i>2. Length equal to or greater than 12,7 mm;</i> <i>3. Single convolution depth greater than 2 mm; <u>and</u></i> <i>4. Made of high-strength aluminium alloys, maraging steel or high strength "fibrous or filamentary materials".</i> 	
7B103	<p><i>"Production facilities" and "production equipment" as follows:</i></p> <ol style="list-style-type: none"> <i>a. "Production facilities" specially designed for equipment specified in 7A117;</i> <i>b. "Production equipment", and other test, calibration and alignment equipment, other than that specified in 7B001 to 7B003, designed or modified to be used with equipment specified in 7A."</i> 	Company's products are not specifically designed, modified, or intended to be used for navigation and avionics
9B009	<p><i>"Tooling specially designed for producing gas turbine engine powder metallurgy rotor components having all of the following:</i></p> <ol style="list-style-type: none"> <i>a. Designed to operate at stress levels of 60% of Ultimate Tensile Strength (UTS) or more measured at a temperature of 873 K (600°C); <u>and</u></i> <i>b. Designed to operate at 873 K (600°C) or more."</i> 	Company's products are not specifically designed, modified, or intended to be used for producing gas turbine engine powder metallurgy rotor components
9B115	<p><i>"Specially designed "production equipment" for the systems, sub-systems and components specified in 9A005 to 9A009, 9A011, 9A101, 9A102, 9A105 to 9A109, 9A111, 9A116 to 9A120"</i></p>	After reviewing all the codes mentioned, it was found that company's products are specifically designed, modified, or intended to be used in any of these applications

5.4.1.3 2nd analysis based on the item description

After finishing the first analysis, it is necessary to proceed into a more detailed analysis that is related to the item description of the company's product. The tables below Table 5 and Table 6 present this analysis that ends up with a result that TOOLSIFY Spa products are not dual-use goods. The criteria for exclusions with dual-use goods that are followed in both tables are the same but with different reasons depending on the item. The table is divided into two parts including first exclusion and second exclusion.

In the first exclusion part, the analysis focused on categories and subcategories of dual-use items that the European Commission had proposed. Numbers from 0 to 9 are the categories and A, B, C, D, E are the subcategories that are presented in Figure 7. For categories, it is essential to know the uses' purpose of the company's products and the industries that could be used in. For example, category 0 represented by nuclear materials is excluded in the table below where the company's products are not specifically designed, modified, or intended to be used for nuclear application. For subcategories, detecting if the item is tangible or not could be a good start to exclude half of the categories. After that based on the description of the item, the other subcategories should be excluded.

In the second exclusion part, the analysis focused on the categories and subcategories that are included in the first exclusion part. As the dual-use code is a mixture of numbers and letters, it is necessary to scan the dual-use items with the included category and subcategory presented in Annex I of the Regulation (EU) 2021/821. Reasons for exclusion could be different depending on the dual-use item description, so one dual-use code could need many reasons to be excluded. Many things could be taken into consideration during exclusion as:

- Definition/description of the process
- The specifically designed purposes
- Characteristics of the process/equipment/material/component/system, etc.

One of the things that must be taken into consideration is whether the product can be disassembled or not. In case it could be disassembled the analysis must not just include the whole goods as one item, but it is necessary to analyze for its parts. Thus, if the whole is not considered dual-use, maybe one of its parts is dual-use and thus it may require export authorization. For TOOLSIFY Spa, the goods cannot be disassembled so the analysis was done for the whole goods as one item.

For taps, thread mills, hobs tools:

Table 5 Exclusion for Taps, thread mills and hobs tools based on Items Description

First Exclusion				Second Exclusion			
Items	reason for exclusion	inclusion	exclusion	check inclusion	reason for exclusion	Inclusion	exclusion
Taps, thread mills, hobs	Tangible items	AB C	D E	1	Company's products are interchangeable tools designed for specific manufacturing processes (tapping, threading and hobbing)		1B001,1B002,1B101,1B102,1B003,1B115,1B116,1B117,1B118,1B119,1B201,1B225,1B228,1B231,1B232,1B233,1B234,1B235
	Company's products are not materials or a composite or a semi-finished product	AB	C	2	Company's products are interchangeable tools designed for specific manufacturing processes (tapping, threading and hobbing)		2B001,2B002,2B003,2B004,2B005,2B006,2B007,2B008,2B009,2B104,2B105,2B109,2B116,2B117,2B119,2B120,2B121,2B122,2B201,2B202,2B206,2B207,2B09,2B219,2B225,2B226,2B227,2B228,2B230,2B231,2B232,2B233,2B350,2B351,2B352
	Company's products are not systems nor components	B	A	9	Company's products are interchangeable tools designed for specific manufacturing processes (tapping, threading and hobbing)		9B001,9B002,9B003,9B004,9B005,9B006,9B007,9B008,9B009,9B010,9B105,9B106,9B107,9B115,9B116,9B117
	Company's products are not specifically designed, modified, or intended to be used for nuclear applications		0				
	Company's products could be designed, modified, or intended to be used for Special materials and related equipment applications	1					
	Company's products could be designed, modified, or intended to be used for	2					

	Material processing applications						
	Company's products are not specifically designed, modified, or intended to be used for electronic, computer, Telecommunications and security information, sensors and lasers, navigation and avionics, marine applications		3, 4, 5, 6, 7, 8				
	Company's products could be designed, modified, or intended to be used for Aerospace and propulsion applications	9					

For punches tools:

Table 6 Exclusion for Punched Tools based on Item Description

First Exclusions				Second Exclusions			
Items	reason for exclusion	inclusion	exclusion	check for inclusion	reason for exclusion	Inclusion	exclusion
Punches tools and their dies	Tangible items	AB C	D E	1	Company's products are simple interchangeable tools designed for specific manufacturing processes	1B003	1B001,1B002,1B101,1B102,1B115,1B116,1B117,1B118,1B119,1B201,1B225,1B228,1B231,1B232,1B233,1B234,1B235
	Company's products are not materials or a composite or a semi-finished product	AB	C	2	Company's products are interchangeable tools designed for specific manufacturing processes	2B204	2B001,2B002,2B003,2B004,2B005,2B006,2B007,2B008,2B009,2B104,2B105,2B109,2B116,2B117,2B119,2B120,2B121,2B122,2B201,2B202,2B206,2B207,2B209,2B219,2B225,2B226,2B227,2B228,2B230,2B231,2B232,2B233,2B350,2B351,2B352
	Company's products are not systems nor components	B	A	9	Company's products are interchangeable tools designed for specific	9B001,9B004,9B009,9B115	9B001,9B002,9B003,9B005,9B006,9B007,9B008,9B009,9B010,9B105,9B106,9B107,9B115,9B116,9B117

				manufacturing processes		
Company's products are not specifically designed, modified, or intended to be used for nuclear applications		0	1B003	Excluded in 1st analysis of dual-use codes based on their correlation with CN codes, Table 4		1B003
Company's products could be designed, modified, or intended to be used for Special materials and related equipment applications	1		2B204	Excluded in 1st analysis of dual-use codes based on their correlation with CN codes, Table 4		9B004
Company's products could be designed, modified, or intended to be used for Material processing applications	2		9B001	Company's dies are not designed for casting tooling		9B001
Company's products are not specifically designed, modified, or intended to be used for electronic, computer, Telecommunications and security information, sensors and lasers, navigation and avionics, marine applications		3, 4, 5, 6, 7, 8	9B004	Company's tools are punches and dies that are not specifically designed, modified, or intended to be used in solid joining of superalloy		9B004
Company's products could be designed, modified, or intended to be used for Aerospace and propulsion applications	9		9B009	Excluded in 1st analysis of dual-use codes based on their correlation with CN codes, Table 4		9B009
			9B115	Excluded in 1st analysis of dual-use codes based on their correlation with CN codes, Table 4		9B115

5.5 Scenario for exporting

To go into a deeper understanding of the export process, a scenario was built in exporting one of the company's products which is thread mills. The analysis proposed in the previous section will be recorded in the record of decisions section. The item will be exported to KALELILER BAGLANTI ELEMANLARI LTD. STL, a Turkish company, which is an industrial enterprise that has been producing for 21 years [31]. It is responsible for manufacturing bolts and nuts that need thread mills as a cutting tool. Checking for sanctions will be recorded in Table 7 to determine whether authorization is needed or not.

Sogedim srl will be the freight forwarder that will be responsible for exporting the goods to the buyer [32]. Sogedim srl operates on the air and sea transport markets according to the highest standards always meeting global compliance and security requirements. İşbank will be the responsible bank for the financial transaction of the export process. This bank is one of the largest private banks in Turkey and was the first bank founded by the Turkish Republic [33].

I. Sanctioned persons, entities and arms embargo, military end-use check

Internal controls are implemented in this section to identify sanctioned people and companies before they engage in exports, re-exports, specified transfers, or specific actions which are forbidden or limited by licensing requirements. The sale, transfer, supply, or export of all dual-use items and technology for military purposes may be prohibited in these sanctioned countries. These countries may also impose restrictions on relevant technical and financial assistance and services.

Table 7 Sanctioned persons, entities and arms embargo, military end-use check

<p>Denied Persons and entity Check: Is a sanctioned person or entity involved in my transaction? The sale, supply transfer, or export of all dual-use goods and technology is prohibited for some persons and entities listed by European Commission. See the EU Sanctions Map for an overview of all applicable EU sanctions and the list of designated persons and entities: https://www.sanctionsmap.eu/.</p>	No
<p>Arms embargo Check: Is the purchasing country or country of destination subjected to an arms embargo? See the EU Sanctions Map for an overview of all applicable EU sanctions and the list of designated countries: https://www.sanctionsmap.eu/.</p>	No
Is the item incorporated into military items listed in the military list of Member states?	No
Can the item be used for development, production, or maintenance of military items listed in the military list of Member State?	No
Do you know that the export item will be or intended to be used for a military end-use?	No
Are you informed by the EU Member States that the item will be or intended to be used for a military end-use?	No
IMPORTANT: In case you answer yes to any of the following questions, contact Export Compliance Officer immediately.	

I. Red flags check:

The company must be constantly vigilant for red flags, which is critical for preventing the spread of WMDs, their delivery systems, the destabilizing accumulation of conventional weapons that could violate human rights. Under EU and national rules and regulations, exchanging information with the competent export control authority may be required in specific instances. Questions about end-use and end-user, shipment, financing, funding, and contract condition are all included in this list of red flags. This list is especially useful for non-listed dual-use products that may be subject to catch-all rules.

Using this list to gather relevant information throughout the license application process for specified dual-use products is also a good strategy to ensure compliance with EU dual-use

regulations. Table 8 below provides a set of 'red flags' mentioned in Commission Recommendation (EU) 2021/1700 to help researchers and compliance employees determine if dual-use export regulations may be applicable [27].

Table 8 Red Flag Check

Know your customer	
Is it difficult to find information about your customer?	No
Is the customer connected to an organization that is engaged in military, WMD, or cybersecurity-related research?	No
Is the customer requesting a typical development, production, or use requirement that seems over capable for the intended application?	No
Is the customer or purchasing agent is reluctant to offer information about the end-use (or end-user) of a product?	No
Is the customer unfamiliar with the product's performance characteristics but still wants the product?	No
Is the customer is known to have, or is suspected of having, unauthorized dealings with embargoed countries?	No
Is the product ordered compatible with the technical level of the business line of the buyer's company?	No
Shipment	
Are there unusual shipping, packaging, or labeling arrangements requested?	No
is the delivery planned out-of-the-way destination?	No
Is the Delivery date Vague?	No
Is there any abnormality in the shipping route for the product?	No
Funding, finance, and contract conditions	
Is the funder refuse to accept a clause that does not allow military end-use?	No
Is the funder unknown?	No
Is the funder communicate only using the email address that does not refer to a research organization, public body, or company?	No
Is the funder provide an unexplained or unusually generous large budget for a research agreement that doesn't contain concrete deliverables or milestones?	No
Are there unusually favorable payment terms such as paying an unreasonable high price or full payment in advance?	No
Is the payment made by other parties than the customer?	No
Is the installation site in an area under strict security control or in an area to which access is severely restricted?	No
IMPORTANT: In case you answer yes to any of the following questions, contact Export Compliance Officer immediately.	

5.6 Record of decisions

It is important for the company to record its decisions. The company may face some risks and these records can protect it from the legal accountability. Records of TOOLSIFY Spa company start from Customs Tariff classification code. The decision of the analysis proposed on the previous section is recorded in Table 9.

Table 9 Customs Code Record

Product Name:	Thread mills
Item Description:	Thread mills are tools that are used to make screw threads.
Customs Classification Number:	82074030
Does the item have correlation with dual-use goods?	NO
If yes, Dual-use correlation codes:	-
Classification decision maker name:	ECO
Date:	25-February-2022

To check and classify TOOLSIFY Spa products, the most qualified employees in the company who have technical credentials and knowledge of each item's specifications will cooperate with the external item classification team who will be responsible to give the final decisions. After receiving the decisions, the company's employees will use the Item Classification Sheet, Table 10, to track and record these decisions.

Table 10 Item Classification Record

Product Name:	Thread mills
Item Description:	Thread mills are tools that are used to make screw threads.
Customs Classification Number:	82074030
Is the product dual use?	NO
If yes, classification number of the dual-use goods:	-

Appropriate Export Authorization No License Required? License Required?	No license required
End-use of the Item (Civilian or Military?)	Civilian
Classification decision maker name:	External dual-use classification team
Date:	01-march-2022
Request For Re-evaluation (Due to changes in EU Regulations).	
Re-evaluation Decision:	
The employee who made the Re- evaluation Name: Email Address:	
Date:	

The transaction screening team with the company's sales department analyzes the End-User and the Destination against EU sanctions and decides whether a license is needed. The decision is noted in the export authorization decision record, Table 11, with adding some details refer to the reason and decision notes for future reference and process verification.

Table 11 Export Authorization Decision Record

Product Name:	Thread mills
Customs Classification Number:	82074030
Dual use Classification number (in case it's dual):	-
Quantity exported:	-
End-User:	KALELILER BAGLANTI ELEMANLARI LTD. STL Turkey, Ankara
End-use of the item (Civilian or Military?)	Civilian
Specific end use:	For manufacturing of bolts and nuts purposes
Appropriate Export Authorization No License Required? License Required?	No license required
Export Authorization Decision made by:	External transaction screening team

Date:	02-march-2022
Request For Re-evaluation (Due to changes in EU Regulations or sanctions)	
Re-evaluation Decision:	
The employee who made the Re-evaluation Name:	
Email Address:	
Date:	

Before shipment, the company should make sure that the freight forwarder complies with all laws and legislations. Freight forwarder compliance decision record table, Table 12, is filled by the company responsible employees mentioning the name of Freight forwarder and whether is this person is compliant or not.

Table 12 Freight Forwarder Compliance Decision Record

Product name:	Thread mills
Customs Classification Number:	82074030
Dual use Classification number (in case it's dual):	
End-user:	KALELILER BAGLANTI ELEMENLARI LTD. STL Turkey, Ankara
Freight forwarder:	Sogedim srl
Is Freight forwarder compliant?	Yes (Italian company)
Decision made by:	External transaction screening team
Date:	03-march-2022
Request For Re-evaluation (Due to changes in EU sanctions)	
Re-evaluation Decision:	
The employee who made the Re-evaluation Name:	
Email Address:	
Date:	

As many banks are subjected to financial sanctions, checking the banking system is also one of our priorities to consider in the internal process flow. This can be recorded in the bank decision record, Table 13.

Table 13 Bank Compliance Decision Record

Product name	Thread mills
Customs Classification Number:	82074030
Dual use Classification number (in case it's dual):	
End-user:	KALELILER BAGLANTI ELEMANLARI LTD. STL Turkey, Ankara
Bank Name:	İşbank
Bank origin:	Turkey, Ankara
Is Bank compliant?	Yes
Decision made by:	External transaction screening team
Date:	03-march-2022
Request For Re-evaluation (Due to changes in EU sanctions)	
Re-evaluation Decision:	
The employee who made the Re-evaluation Name:	
Email Address:	
Date:	

The final decisions of classification and authorization of goods is summarized and transferred to the final decisions Table by the ECO, Table 14, to make sure it's utilized at high-risk points in the internal process flow. Furthermore, Prior shipment Check is one of the company instruments to verify that they use the necessary export authorization consistently and accurately. It is a review that is performed to ensure that the shipment complies with EU dual-use regulations before shipment. ECO is responsible for making sure the table is up to date and correct. The format is set up in such a way that employees can understand and use the Table effectively. As new items and export destinations are introduced, the format of the table may be modified, and decisions may be added.

Prior shipment Check:

Date:

Distribute to:

Technical expertise

Sales department

Export legal counsel

From: Export compliance Manager/Officer

Subject: Final Decisions Table Revision

The attached table shows the final item classification and authorization decisions made under EU dual-use regulations. Verify that the decisions made are entirely and consistently under our ICP before proceeding with the transaction.

Note:(in case there are changes in EU regulations)

Based on changes published by the EU commission on (date), please note that the items previously classified under (Classification number) are now classified under and need an instant review.

Or

Based on changes published by the EU commission on (date), please note that some restrictions are added to (Country, entity, person) we are exporting and require an immediate records evaluation.

Table 14 Final Decisions Summary

Product Name:	Customs code	Dual use Classification number (in case it's dual):	Freight Forwarder :	Bank Name:	End-user:	Authorization decision:
Thread mills	82074030	-	Sogedim srl	İşbank	KALELİLER BAGLANTI ELEMANLARI LTD. STI Turkey, Ankara	Not required

Documentation for Customer Profiles.

To screen incoming orders, it would be necessary to have a document for every customer the company is dealing with. The customer file would contain all information about a customer's personal and any information suggesting a risk of brokering and other risks related to compliance with the EU dual-use regulation. Table 15 should be updated in case of any new information is found.

Table 15 Customer Profile

Customer Profile Form							
Customer Number:							
Company Name:	KALELILER BAGLANTI ELEMENLARI LTD. STL						
Location of Company:	Alinteri Bulvari No:26 Ostim/Ankara/Turkey						
If branch, location of home company							
Type of Ownership	Solo:		Partnership		Corporation	✓	Other:
Nature of business	Government sector		Military sector		Manufacture sector	✓	
	Service sector		Technology sector:		Other:		
Number of years in business	21 years						
Company Owner(s)	-						
Company Representative Name:	-						
Mailing address:	satis@kaleliler.com.tr						
Have you visited the customer company?	No						
If yes:	How many times:	-	Date of the first visit	-			
			Date of the last visit	-			
New customer:	Yes						
If not, how many years are you dealing with this customer:	-						
Product order name:	Thread mills						
Customs Classification	82074030						
Are product dual-use goods	No						
If yes, write the classification number	-						

Does this product require authorization?	No	
End-use of product:	Thread mills are tools that are used to make screw threads.	
Shipping address:	Dağyaka Mah. 622. Sok No 4 Saray / Kahramankazan / ANKARA	
Additional notes:	-	
Customer Profile is done by:	Name:	Sales manager
	Email address:	-
	Phone number:	-
	Date:	02-March-2022
Sanctioned persons and entities check	Is the customer subjected to EU Sanctions?	No
Brokering Risk Red Flag Check	Is it known or are there signs that the consumer is at risk of brokering?	No
Nuclear End-use check	Is it known, or are there signs, that the customer is involved in nuclear activities, either directly or indirectly?	No
Chemical End-use check	Is it known, or are there signs, that the customer is involved in the design, development, production, or use of a chemical weapon, either directly or indirectly?	No
Biological End-use Check	Is it known, or are there signs, that the customer is involved in the design, development, production, or use of a biological weapon, either directly or indirectly?	No
Military End-use check	Is it known, or are there signs, that the customer is involved in military activities, either directly or indirectly?	No
IMPORTANT: In case you answer yes to any of the following questions, contact Export Compliance Officer immediately.		

6 Summary

Despite the laws and legislations that the EU has imposed, controlling of export of dual-use items is still considered a big challenge. These challenges are also linked more specifically to the companies that deal with such goods as they have a crucial role in helping in mitigating risks. This report highlights the risks that companies could face either internally in the offices and divisions involved in the export process or externally during the export process. The report evaluates a range of cross-cutting compliance-related issues of concern to generate better guidance and tools for companies to improve their ICP.

To ensure compliance with EU dual-use regulations and to maintain the safety of company operations, the company must analyze risks, identify end-users, end-use, items, brokers that may raise issues about export compliance. Companies should implement their ICP taking into consideration a range of factors like their size, location, end-users, product range, and market structure, paying close attention to all vulnerabilities that could weaken from their compliance program.

Export controls are not a panacea for all human rights problems. Violations may occur intentionally or unintentionally where these controls cannot address every possible risk. Nevertheless, these controls can be a strong supportive for companies to protect their reputation on one hand and human rights in general as well on the other.

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