TABLE OF CONTENTS

Preface

If you produce machines, equipment, computing, electronic components, materials, chemicals, biological agents, etc., if you create technologies and software, if you are involved in international trade, if you want your company to carry out the operations of export, import, re-export or transit in full compliance with strategic goods trade regulations, we would like to introduce to you "The Handbook on control of dual use items" (hereinafter the Handbook). Its primary objective is to provide business and civil society with information about international and national export control systems, to give recommendations and tips to persons involved in foreign trade relationships on export control issues and approaches implemented in practice.

The Handbook was created in accordance with Article 8 (d) of the UNSCR 1540 (2004), which obliges all States to develop necessary methods for communication with industrial and civil societies (including scientific research and academic institutions) in order to inform them about the obligations imposed by national normative acts pertaining to non-proliferation.

This Handbook will provide you with information on the following issues:

- International regimes, agreements and treaties, resolutions, sanctions, embargoes, obligations of Georgia in the field of national and international security related to non-proliferation of weapons of mass destruction;
- National legislation in the fields of strategic goods trade control, types of permits, criteria and requirements for obtaining a permit, as well as administrative procedures for obtaining a permit;
- Obligations of the permit holder;
- Features and characteristics of the export control system of Georgia;
- The Export Control Internal Compliance Program (ICP) and ways of its implementation in practice;
- The customs control and customs clearance procedures of strategic goods;
- The electronic system of permits and licenses;
- Methods for identifying goods and technologies;
- Rules for using the National Control List, compulsory measures set forth in the Georgian legislation;

This Handbook will also deal with challenging issues raised by the business sector and will refer to the increasing awareness of recent developments, trends, approaches and processes in this field of strategic trade control.

The Handbook will give business operators an opportunity to receive information on amendments to the control lists and relevant legislative acts and bylaws at any time. They will also get answers to questions they are interested in, e.g. identification-related questions concerning export and import of products of particular companies, whether they fall under control or not against the dual-use items control list, restrictions on trade with certain countries, procedures that are required to obtain the necessary permits, etc. Therefore, the Handbook is going to lend a helping hand to business operators

in developing relations like this between the licensing authorities and permit seekers in the future, providing up-to-date information.

In addition, the objective of the Handbook is to facilitate trade in strategic goods for peaceful purposes by supplying information about the export control system to Georgian business representatives.

We hope that the Handbook will raise awareness among business operators involved in strategic trade control of non-proliferation of weapons of mass destruction (hereinafter WMD), of the recent developments in global and national dimensions, and of trends and processes in this field. In addition, the new Handbook will help customs authorities to strengthen feedback from the industry and other entities involved through requesting opinions on information contained in the Handbook for its further improvement.

Providing industries and other entities with updated reliable information and receiving feedback will develop public-private partnership in the field of strategic trade control, which is a necessary condition for the improvement of the national export control system.

SECTION 1: What does export control mean and how has the current control system developed in different countries

1.1. Definition of Export Control

Export control regulates the delivery/shipping/forwarding of goods, software, technologies or services related to the production of weapons of mass destruction or their delivery systems.

Export control is the implementation of state control over export aimed at maintaining national and international security ensured by restrictions imposed on the export of products that may be used to create nuclear, chemical and biological weapons of mass destruction and their delivery systems.

This is a combination of complex measures ensuring the implementation of control measures set forth by international and national regulatory acts on the export of goods that can be used to create nuclear, chemical and biological weapons of mass destruction and their delivery systems.

Export Control - This is a set of measures ensuring control over (licensing of) foreign trade operations with specified commodities and technologies.

The implementation of a national regime of export control requires the creation of a special system that includes the legislative base, lists for control goods and technologies (control lists), procedures for issuing permits (including identification of products, inter-agency cooperation, etc.), control mechanisms for the fulfillment of obligations under the licenses, charging measures in case of violations of law (liabilities), as well as compliance with international treaties and agreements.

Export control is an important tool for regulating trade in arms, dual-use items and high technologies.

According to The World Trade Organization Terminology (Explanation), Export Control is a set of non-tariff activities of foreign economic regulations.

1.2. Historical Overview of Export Control System in Georgia

The proliferation of goods and technologies used to build WMDs and their delivery systems creates a threat to global stability and security, particularly taking into account the situation in the world entering the era of terrorism and extremism. Georgia that is under military threat is located in a strategic geographic area, facing many difficulties. It should have the goal of minimizing the risks to its national and global security in accordance with its obligations under the non-proliferation regimes aimed at countering illegal movement of strategic goods and hazardous materials.

On 9 April 1991, the Supreme Council of the Republic of Georgia adopted the "Act of Restoration of State Independence of Georgia". On the same day, the US Senate recognized the legitimacy of the

referendum of 31 March (98% of the country's population voted for independence), which was the de facto recognition of Georgia's independence.

In July 1992, as an independent state, Georgia became the 179th member of the United Nations, which means that the country recognizes the values and principles of the organization and joins the efforts of the international community aimed at maintaining peace and security in the world by means of joining many multilateral and bilateral agreements and treaties.

Georgia, as a member of the UN, fulfilled and fulfills UNSCRs, joining decisions on imposing sanctions on some countries developing nuclear and missile programs. Such Resolutions are applied to Iran - 1737 (2006) and 2231 (2015) - and North Korea - 1718 (2006) and 2375 (2017).

On 7 March 1994, Georgia joined the Treaty on "Non-Proliferation of Nuclear Weapons" adopted by the UN General Assembly by Resolution 2373 (XXII) of 12 June 1969.

On 22 May 1996, Georgia joined "The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction", which was ratified by the Resolution 132 of 6 March 1996 of the Parliament of Georgia.

Since 27 November 1995, Georgia has been a member of "The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction".

The Law of Georgia on "Export Control of Arms, Military Equipment and Dual Use Items" (known as "Law of Georgia on Export and Import Control of Arms, Military Equipment and Dual Use Items" since 2003) came into force on 1 September 1998. This law lays down rules and foundations of the implementation of export control for arms, military equipment, raw materials, materials, equipment, technologies, scientific and technical information and related services in the field, in order to strengthen international and national security interests and the regime of non-proliferation of weapons of mass destruction.

On 22 September 2002, the Ordinance of the President of Georgia No 408 on "Determination of Control Measures for Export, Import, Re-Export and Transit Issues of Dual-Use Items Subject to Export Control" came into force. It approved a list of dual-use items subject to export and import control and a dual-use export permit form.

However, the control mechanism was merely sufficient and it was decided to control goods based on the list in accordance with the Harmonized System Codes, not according to their technical parameters. As a result, lots of items fell under control that had no strategic features or application. Correspondingly, Georgia made a significant deviation from international regulations. That is why, with the help of Federal Office of Economic Affairs and Export Control of Germany (BAFA), Georgia elaborated and adopted a new Government Decree by which a partial harmonization with European Control List (reg.: 428/2009) took place in 2011. In brief, we received a new control list with some controlled items based on technical explanations and relevant Harmonized System codes. As a result, export control procedures improved and became more user-friendly.

On 25 November 2013, Georgia signed one of the most important international agreements in its history - "Association Agreement on the one hand between the European Union and the European Atomic Energy Union and their Member States and on the other hand Georgia,"[1] (ratified by the Ordinance of Parliament of Georgia No 2495-RS of 18 July 2014), which restated its commitment "to cooperate and contribute to the fight against the proliferation of weapons of mass destruction and their delivery systems by means of the following actions:

- Taking steps to sign, ratify, or accede to, as appropriate, and fully implement all other relevant international instruments; and
- Establishing an effective system of national export controls, controlling the export as well as transit of WMD-related goods, including a WMD end-use control on dual-use technologies, and containing effective sanctions for breaches of export controls" (Association Agreement, Section II, Article 10).

In 2014, with the great help of BAFA and The Export Control and Related Border Security (EXBS) Program of the US Department of State, Georgia adopted the new "Law on Export Control of Military and Dual-Use Items" and the relevant control list and bylaws that Corresponds to the control list under the EU (EC) Regulation No. 428/2009 as amended by the EU (EC) Regulation No. 388/2012, in order to satisfy the requirements of the Association Agreement and UN Security Council Resolution 1540 (2004) with respect to all states to adopt and efficiently implement relevant national legislation, efficient measures for border control and law enforcement, to establish, to retain and maintain necessary efficient control on export and cross-border movement, and to elaborate Control Lists as soon as possible.

In this Handbook, you will learn more about the essence, purposes, and content of each component of our country's export control.

1.3. History of development of control systems on international trade in strategic goods, materials and technologies

This section will describe the experience of various leading countries in controlling international trade in certain materials, equipment and technologies. Export control has been changing in each country together with changes in the security situation in the country, the region, and the world. This means that the export control system of each country has its own historical background. This section describes the unique experience of some countries and regions in creating national export control systems.

Economic sanctions, including trade and financial sanctions, are prohibitive economic measures used by one participant of international trade (a country or a group of countries) applied to another participant ("the object of sanctions") coercing the latter to change its domestic or foreign policy.

[1] http://www.parliament.ge/ge/ajax/downloadFile/34754/AA_ENG

Economic sanctions have a long history. They have been used for the weakening of the military and economic potential of the adversary by a belligerent. In the antiquity and medieval times, such sanctions were called "repressions". In 432 BC, the Athens Maritime Union imposed sanctions on the Greek city of Megara.

The concept of embargo emerged in the 17th century (Spanish: *embargo* "prohibition". In some sense, the word *embargo* originated from the Latin term *imbarricare* - "obstacle"), when countries seized merchant vessels and weapons of another state. Over time, this term established itself in international law and is actively used to regulate relations between states and to resolve international trade disagreements.

In response to the United Kingdom's coastal military and naval blockade of France of 16 May 1806, Napoleon issued a Berlin Order on 16 May 1806, which imposed a large-scale embargo on exports from Great Britain to European countries known as the Continental Blockade, which continued until 11 April 1814.

In 1807, the US Congress adopted a law on the embargo on Great Britain and France in response to the arrest of American merchant ships.

As a rule, sanctions and embargoes were always commensurate with the extent of hostilities. It was only after World War I that an international approach to the replacement of aggression with sanctions was introduced. The idea that aggression could be avoided by the collective use of economic sanctions laid the basis for the creation of the League of Nations in 1920.

The goals of the League of Nations included disarmament, prevention of hostilities, collective security, settlement of disagreements between countries through diplomatic negotiations and improvement of the quality of life on the whole of the planet. The League of Nations ceased to exist in 1946.

Partial or complete restrictions on trade imposed by a state or a group of countries, sanctions and embargoes on a country that violates internationally accepted security norms or infringes on the rights of its own citizens are used increasingly often as a lever to force the country to change foreign and domestic policy.

The imposition of an international embargo is also envisaged by the United Nations Charter as a collective repressive measure against states, which threaten global security (e.g. UN sanctions against North Korea).

Such measures may limit or impede imports/exports, introduce quantitative quotas and special taxes and fees, prohibit cargo transportation, freeze assets and bank accounts and prohibit and restrict exports of high-tech products and technologies (e.g. COCOM, US and EU sanctions).

In the second half of the 20th century, new threats emerged in the world in the shape of a competition in gaining military advantage over a country, creating weapons of mass destruction, and trading in nuclear materials and technologies that further expanded the geography of the states possessing nuclear weapons.

This period is marked by the formation of informal unions (so-called regimes) of countries exporting nuclear, chemical and biological materials and armaments. The countries assumed responsibility for carrying out export control on the movement of strategic goods.

Combination of priorities set forth in international agreements and treaties achieved in the field of non-proliferation controls and principles of these regimes formed the basis for the international export control systems of military and dual-use items, which were introduced at the national level in many countries, including Georgia.

The export control system of each country has its own historical background. This section describes the unique experience of some countries and regions in creating national export control systems.

1.3.1. United States of America

The export control system of the United States has been evolving dynamically since early days, reflecting the country's strategic interests, which are changing from administration to administration as time goes by. In addition, the USA has been playing a decisive role in the development of other countries' export control systems for decades now. One of the main tools of influencing other countries is that US administrations constantly impose economic, political, financial, trade and other kinds of sanctions on any country violating international conventions and treaties, which threatens global security.

The long-term practice of economic sanctions and embargoes and combinations of regulations have led to the formation of the US export control system that has played an important role in the establishment of non-proliferation control regimes and the international system of strategic goods trade control.

Below is a brief overview of the historical background of the US export control system:

Trading with the Enemy Act, which was adopted by the US Congress on 6 October 1917, prohibited US citizens and companies from conducting trade operations with countries that are in a state of war with the United States. For example, this law prohibited trading with Nazi Germany and its allies and the violators of this law were subject to strict sentences. At the end of the 20th century and the beginning of the 21st century, this legal act was applied to countries that US thought were funding terrorists and illegally created weapons of mass destruction. Iraq and North Korea were among these countries. Today, this law applies only to Cuba, while North Korea was the last state that was removed from the jurisdiction of this act.

The 1940 law adopted by the US Congress on Export Control was some kind of declaration of President Roosevelt aimed at preventing the deficit of some strategic goods during the previous war period and forbidding exports of parts of aircraft, chemicals and minerals from the United States without authorization. The law states that whenever the President deems it necessary for national defense interests, it may prohibit or limit exports of military equipment, ammunition, tools and materials.

The extension of the aforementioned law was the so-called **"Law of 1949 on Export Control",** which imposed limitations on the exports of goods to the Soviet Union and its allies. This was the first peaceful law on export control, which was adopted based on the analysis of threats emanating from the Soviet bloc.

At the same time, **the North Atlantic Treaty Organization (NATO),** a system of collective security against the Soviet Union, was established in April 1949 with 12 initial member nations: Belgium, Canada, Denmark, France, Iceland, Italy, Luxemburg, the Netherlands, Norway, Portugal, the UK, and the USA.

The Cold War period is also associated with the establishment of the **Coordinating Committee for Multilateral Export Controls, COCOM in 1949** with the function of carrying out multilateral control over exports to the Soviet Union and other Socialist countries.

In 1951, in conjunction with the Korean War (1950-1953), the Congress adopted the **Law on Defense Mutual Assistance and Arms Control** (also known as the Battle Act), which prohibited US assistance to countries trading with the Soviet Union and set restrictions on export of weapons, ammunition, nuclear raw materials and other strategic products (that could be used for the creation of nuclear weapons) to the Soviet bloc states.

The 1949 Law on Export Control was amended by the 1969 **Law on Export Administration** (1969), which turned existing approaches to export control into embargo-like approaches.

Federal Law on International Emergency Economic Authorities (IEEPA) 1977) gives the US President the authority to identify unusual and extraordinary threats to the country's national security, foreign policy or economy emanating from outside the USA and thereupon, block transactions and freeze assets to combat these threats, whereas, in case of an actual attack on the United States, the President is authorized to confiscate the property of the country, group or entity associated with this attack.

After the changes of 1974 and 1977, the Act adopted in 1979 was the ultimate form that is the basis for the US export control.

In December 1990, the **WMD Extensible Enhanced Control System (EPCI)** came into force at the initiative of the US Administration. It became the basis for the formation of "end-user" control and so-called "comprehensive control" ("catch all") mechanism.

Nonproliferation and Export Control Cooperation and the EXBS Program (1994): In 1994, the Nonproliferation and Export Control Cooperation (NEC) team was established. This group was supported by the US Export Control Cooperation Program with the role of coordinator in relations with Russia, Ukraine, Kazakhstan, Belarus, Central Asia, the Caucasus, and the Baltic and Central European countries. At the end of 1995, the NEC Group, together with representatives of the US State Department, Defense, Energy and Customs Services, launched annual collaboration with the aforementioned countries. This program, which is called the Export Control and Related Border Security (EXBS) Program, greatly contributed to setting up national export control systems in these countries.

President Obama launches the Export Control Reform Initiative (2009): In August 2009, President Obama directed a broad-based interagency review of the US export control system aimed at strengthening national security and the competitiveness of key US manufacturing and technology sectors by focusing on current threats, as well as adapting to the changing economic and technological landscape. This review determined that the current export control system is overly complicated, contains too many redundancies, and, in trying to protect too much, diminishes US ability to focus its efforts on the most critical national security priorities. As a result, the Administration launched the Export Control Reform Initiative, which will fundamentally reform the US export control system. The Export Control Reform Act (ECRA) became law on August 13, 2018.

As part of an export reform initiative, in November 2010, President Obama issued a decree (13558) on the establishment of an Export Enforcement Coordination Center (E2C2), which would serve as a bridge between federal law enforcement and intelligence agencies, as well as an export licensing agency and facilitate inter-agency cooperation in the field of export controls.

On August 13, 2018, President Trump signed the Export Control Reform Act (ECRA), which repealed the Export Administration Act (EAA) of 1979 and established a permanent legislative framework for regulating export controls under the EAR.

In the process of export controls, ECRA establishes rules for inter-agency cooperation and instructs government agencies to review and revise licensing terms for exporting, re-exporting and transferring goods to countries subject to embargoes/sanctions imposed by the United States or the United Nations.

ECRA also establishes inter-agency coordination processes to identify new and fundamental technologies. According to ECRA, the authorized agencies involved in these processes are the US Department of State, Department of Defense, Department of Energy and Department of Commerce.

Let's take a quick look at how the US export control system works:

The following export restrictions apply in the United States:

- Restrictions on the export of dual-use goods, technologies and services are administered by the Department of Commerce and are regulated by the Export Administration Regulations (EAR) established by the Bureau of Industry and Security (BIS) of the Department of Commerce;
- Restrictions on the export of military goods, technologies, and services are administered by the US Department of State and are governed by the US regulatory regime and military list (ITAR, USML) established by the Directorate of Defense Trade Controls (DDTC);
- Sanctions and embargoes are supervised by the Office of Foreign Assets Control (OFAC) of the US Department of the Treasury.

The following are governed by the US Export Administration Regulations (EAR):

- All goods and services whose country of origin is the United States, regardless of their location;
- Components, materials, software and other items originating in the United States that are used to create/assemble products in another country and their share in these products exceeds the maximum threshold set for components manufactured in the United States (de minimis);
- Certain foreign goods produced directly using US technology or software;
- Certain goods produced at a facility located outside the United States, or using the main equipment of that facility, if the facility/equipment was created directly using US technology or software.

According to the Export Control Regulations (EAR), the export of goods from the United States to another country is considered export regardless of the mode of transport.

It can be transported by regular mail, hand luggage or luggage, as well as via the Internet: for example, to send software or technology to an email address or to download/upload from a website, transfer technology by fax or phone, etc.

Temporary export of goods from the United States is also considered to be export, sending non-profit goods to another country (for example, a gift), delivering goods outside the country to a subsidiary owned by an American company, transferring foreign goods through the United States to another country or returning to the country of origin. The transfer of software or technology to which the EAR rules apply to a foreign national within a country is considered to be export to the country of which the person is a citizen[2].

The Bureau of Industry and Security (BIS) of the Ministry of Commerce issues a license to export goods in accordance with the Export Administration Regulations (EAR).

[2] For export administration rules, please see:
https://www.bis.doc.gov/index.php/regulations/export-administration-regulations-ear

When issuing a permit, BIS takes into account the technical specifications, the level of technology used in the goods, country of destination and end user and end use of the goods. Thus, when exporting goods from the United States, it is important to determine:
- what is exported
- where are the goods delivered,
- who is the recipient
- For what purposes will these goods be used.

The Commerce Control List (CCL) includes products and technologies exported under the control of the Department of Commerce. CCL is divided into ten broad product categories, and each category is divided into five groups.
In accordance with these categories and groups, In CCL the products are given export control classification number - ECCN. *

ECCN is a five-digit alphanumeric code (for example, 3A001), the first digit of which indicates a product category, and the second digit represents a product group.

The obligation to provide ECCN for goods destined for export lies with the exporter. However, he/ she may contact BIS to request classification of goods.

If goods and services are controlled by BIS but are not included in the control lists, these products are labeled EAR99.

EAR99 items are generally less sensitive consumer goods and often do not require an export license. However, if EAR99 items are shipped to a country subject to sanctions/embargoes and/or the end user is suspicious or under sanctions, an export license may be required.

After the goods have been classified, the need for a license should be determined taking into account the country of destination and the so-called “reason for control”.

Each ECCN in the CCL contains a corresponding “reason for control” code:

CB - Chemical & Biological Weapons;
NP -Nuclear Nonproliferation;
NS - National Security;
MT - Missile Tech
RS - Regional Stability;
FC - Firearms Convention;
CC - Crime Control.
AT – Antiterrorism

The first annex (table) to part 738 of the EAR indicates a list of countries and the “reasons for control” of these countries.

For example: If at the intersection of the columns of the country (to which ECCN goods are exported) and "reason for control"[3] (whose code is indicated by ECCN), the box is marked with the letter "X", then a license is required for export to this country.

After determining the need for a license in accordance with the trader country, it is important to determine who is the recipient and end user of the goods, since it is forbidden to transfer goods to certain individuals and legal entities, and some can only receive goods on the basis of a license (even if the goods are not controlled by ECCN, "reason for control " and EAR99-).

Consolidated Screening List (CSL) is a list of individuals to whom the US government places restrictions on certain types of exports, re-exports, and transfers. CSL is compiled by the US Department of State, treasury and Department of Commerce.

The list of sanctioned persons and the CSL search engine are available on the website, which allows exporters to verify the recipient and end user of the goods[4].

If it turns out that goods destined for export need a license, the exporter must contact BIS to request a license.

If BIS approves the application for a license, the exporter will receive a license number and expiration date. Typically, a BIS license is valid for 4 years[5].

1.3.2. European Union[6]

The European Union - a political and economic union consisting of 28 member states of Europe, was established in 1992 in accordance with the Treaty on Maastricht (came into force on 1 November 1993). The creation of a single foreign and trade policy envisaged by this agreement provided for the establishment of a unique export control system for strategic goods trade, which was reflected in the decision No 94/942/CFSP on joint actions against the export of dual-use items and the EC No 3381/94 decision of the Council, on unified control regime on export of dual-use items in the territory of the Union.

On 22 June 2000, the Council Resolution (EEC) No 1334/2000 was adopted to establish the EU regime for the purpose of controlling exports of dual-use goods and technologies in order to improve the harmonization and efficiency of these regulations.

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[3] For the "reason for control" by country, please see:
https://www.bis.doc.gov/index.php/documents/regulations-docs/2383-supplement-no-1-to-part-738/file

[4] https://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/denied-persons-list
https://build.export.gov/main/ecr/eg_main_023148 (CSV Download)

[5] For brief US export control instructions, please see:
https://www.bis.doc.gov/index.php/documents/regulations-docs/142-eccn-pdf/file
https://www.bis.doc.gov/
https://www.bis.doc.gov/index.php/documents/regulations-docs/142-eccn-pdf/file-es

[6] http://ec.europa.eu/trade/import-and-export-rules/export-from-eu/dual-use-controls/

In 2009, the EU adopted a new regulation (EC) 428/2009, which led to a number of substantial changes in the European export control dual-use items. Such news was similar to the introduction of brokerage services, technical assistance and transit control measures related to dual-use items. The regulation (EC) 428/2009 also updated the list of controlled items in accordance with the decisions of Nuclear Suppliers Group, Missile Technology Control Regime and the Wassenaar Arrangement in 2008, and of the Australian Group in 2009.

Today, the Regulation (EC) 428/2009 regulates the EU export control regime, which includes:

- Unified rules of export controls, including aggregate criteria and types of permits (individual, global, and common types of permits);
- Common list of EU dual-use items;
- "Required conditions" for elements not included in the list that can be used in the creation, development or use of the weapons of mass destruction;
- Control over the brokerage services and transit of dual-use items;
- Introduction of specific measures of control by exporters such as accounting and registers;
- Coordination and exchange of information between authorized agencies, ensuring control measures throughout the EU and consistent implementation.

In addition, EU member states can introduce additional measures of export control on specific goods in order to ensure public safety and human rights protection. The decision-making and review process of applications for obtaining a permit for exports to member states shall be subject to national authorities.

The EU export control system fully reflects the obligations agreed by the multilateral regimes of export control, such as the Australia Group, Wassenaar Arrangement, Nuclear Suppliers Group, and Missile Technology Control Regime.

With the rapid development of techniques and technologies and the ongoing political changes in the world, Regulation 428/2009 includes annual amendments, updated lists, new items and technologies, specifications of technical parameters, etc.

Key amendments to the Regulation No 428/2009 since 2009 until now have been made by the following Council Regulations of Europe: №№ 1232/2011, 388/2012, 1382/2014, 2016/1969, 2017/2268 and 2018/1922.

1.3.3. South Korea

South Korea's export control system was founded in 1987, when the country signed a Memorandum of Understanding on the Protection of Strategic Goods and Technology with the United States, which was an agreement prohibiting unauthorized exports of COCOM-controlled items from the country to communist bloc destinations. Subsequently, the country laid a foundation for its export control regime by amending the Foreign Trade Act, which is now the basic law that governs the country's export controls.

In 1992, the government made an amendment to the Foreign Trade Act and authorized the minister of commerce to require permits for the exports of strategic items. However, the government of South Korea announced a comprehensive plan for setting up a legal and organizational framework for licensing authorities only in 1993. South Korea's political consequent commitment to non-proliferation of strategic goods and technologies led to its becoming an original member of the WA in 1996. Having also joined the NSG in 1995, AG in 1996, and MTCR in 2001, the country is now implementing rigorous controls in conformity with international norms.

Since then, the export control system of South Korea has advanced considerably. Catch-all control was introduced in 2003, strategic trade information system called "Yestrade" was introduced in 2005, the Korea Strategic Trade Institute called "KOSTI" was established in 2007, and the European ECCN system for item classification was introduced in 2008.

In December 2015, the government enacted the Defense Technology Security Act to secure national safety and enhance national credibility by systematically protecting defense technologies and by supporting relevant agencies. Also, under the act, institutions possessing such technologies are designated as "defense-related institutions." Such institutions are obliged to establish a defense technology security system.

1.3.4. National Export Control System of Ukraine[7]

Ukraine's export control state system is a system of joint actions of export control authorities and a variety executive agencies ensuring proper control of international transfer of goods in compliance with international obligations and guiding principles of Ukraine in the field of export control and security.

The history of the formation of Ukraine's export control system begins from the independence of the country and the law on Foreign Trade the Ukrainian Rada passed in 1991 can be regarded as the first legislative step in this field. In particular, Article 20 of the law says that import and export of arms, ammunition, military equipment and special components, explosives, nuclear materials, technologies, equipment and other goods and services could be carried out only by persons authorized by the Ukrainian government. Such authorization and regulation of relevant export and import operations are under the jurisdiction of the Ukrainian cabinet, which coordinates its decisions with the relevant standing committee of the Supreme Rada of Ukraine.

State control of exports was effectively established by Decree No 45 of the Ukrainian president of 20 January 1992 and Decree No 153 of 25 March 1992 of the Ukrainian cabinet, which provided for the creation of the Government Expert Technical Commission under the guidance of the minister of

[7] http://www.dsecu.gov.ua/control/en/publish/article?art_id=35787&cat_id=35542
http://www.dsecu.gov.ua/control/uk/publish/article?art_id=35039&cat_id=35038
https://www.rbc.ua/rus/news/kabmin-utverdil-novyy-poryadok-kontrolya-1540379281.html
http://www.kpl.net.ua/ru/Export_Control_Permit_Ukraine.html?gclid=EAIaIQobChMIrO7AxbLt3wIVGeWaCh06EAMlEAMYASAAEgL0rPD_BwE

mechanical engineering, military-industrial complex and conversion. The commission had relevant functions and power to make decisions on export and import of certain types of products of military and industrial enterprises. In line with international practice, control was carried out to prevent the spread of weapons of mass destruction and conventional arms. The main task of the commission was to establish an export control system in Ukraine and promote cooperation with other countries in this area.

By Order No 3/93 of 3 January 1993 of the president of Ukraine on "The Improvement of National Export Control" the Government Expert Technical Commission was transformed into the State Control Commission of Export Control led by the Vice Prime Minister of Ukraine, and the Technical Expertise Committee was created by Decree No 779 of the Ukrainian cabinet of 21 September 1993. The main objective of the latter was to ensure state control of export and import of controlled goods, as well as compliance with international legal norms of non-proliferation of weapons of mass destruction. Its competence included issues related to export and import of military equipment and dual-use items and technologies.

The State Export Control Committee consisted of representatives of the Ministry of Foreign Affairs, Ministry of Defense, Ministry of Foreign Economic Relations, Ministry of Mechanical Engineering, National Academy of Sciences, the State Border Committee, the Customs Service, the Security Service, Ministry of Internal Affairs, Ministry of Justice, Ministry of Economy, Ministry of Environmental Protection and the State Nuclear Committee.

On 4 March 1993, the cabinet approved a list of goods, materials, equipment and technologies that require special permits from Ukraine.

Since then, Ukraine has signed the following non-proliferation agreements and treaties:

- In 1993 – Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (ratified in 1998);

- In 1994 - Nuclear Non-Proliferation Treaty, Memorandum on Transfer of Missile Equipment and Technologies between USA and Ukraine, various documents of the International Atomic Energy Agency.

Ukraine became a member of the international regimes of export control: In 1996 - the Zangger Committee, the Nuclear Suppliers Group and Wassenaar Arrangement, in 1998 - the Missile Technology Control Regime, in 2005 - Australia Group.

After the various types of changes and experiments carried out in the export control system by the end of the 1990s, Order No 1265 of the president of Ukraine of 27 December 2001 led to the formation of the Ukrainian Export Control Service that has a special status of the central executive and the state export control policy body.

The legal framework of state export control of Ukraine includes the constitution of Ukraine, laws, decrees of the president and cabinet, other normative acts, as well as international treaties, agreements and obligations[8].

Law of Ukraine On the State Control over International Transfers of Military and Dual-Use Commodities regulates state control over international transfers of military and dual-use commodities in order to ensure the protection of national interests of Ukraine, as well as compliance with the obligations under the non-proliferation of WMD and their delivery systems, and measures to prevent usage of those commodities for terrorist and other illegal purposes.

According to this law:

"**International Transfer of Goods**" means export, import, re-export, temporary importation and temporary exportation, transit through the territory of Ukraine, as well as transfer of goods in any form outside Ukraine.

"Dual-use goods" is manufacture, equipment, materials, software and technology, individual species, which are not specifically intended for military use, as well as related services (technical assistance), which, in addition to civilian purposes, can be used for military terrorist purposes or for the development, manufacture and use of military goods, weapons of mass destruction and their means of delivery or other nuclear explosive devices, including certain nuclear materials, chemical substances, bacterial, biological and toxic substances, approved by the list of the Ukrainian cabinet.

According to Article 5 of the law, the methods of state export control are:

• **Identification of goods** that involves the designation of conformity of particular goods intended for international transfer with the name and description of the goods included in the lists of goods subject to state export control.

Preliminary identification of goods (as well as carrying out all necessary measures for obtaining permit documents for international transfer of goods) is the obligation of entrepreneurial entities and persons determined by the legislation. These persons are entitled to entrust the legal entities, which have the authority to carry out preliminary identification activities of the goods under the established rules, with the preliminary identification of the goods;

• **Issuance of permit or conclusion** on the international transfer of goods or the conduct of negotiations on such transfer.

The permit is a document issued by the central executive body determining the state export control policy that gives the right of export and import of goods.

[8] https://zakon0.rada.gov.ua/laws/show/549-15 (law on the State Control over International Transfers of Military and Dual-Use Commodities)

The conclusion is a document issued by the central executive authority, determining the state export control policy, which authorizes to temporarily import/export and transit goods, negotiate on international transfer of goods or export of dual use and other goods to the countries under a partial embargo on the supply of such goods.

According to the Ukrainian legislation, permits and conclusions can be single, general and open.

The Ukrainian Export Control Service is the authority, which issues permits and conclusions.

• Customs control and customs clearance according to the legislation

The revenue and tax authorities of Ukraine carry out the procedures and formalities for customs clearance of dual-use commodities at the border checkpoints (BCPs) and customs checkpoints (CCPs) on the basis of the relevant permit documentation, using "single window" principle according to the Customs Code of Ukraine. Using the "single window" principle, the aforementioned authorities shall, at the request of the importer, also issue a certificate of delivery in electronic or written form, confirming the entry of goods to Ukraine.

• Use of sanctions against entrepreneurial entities, who have violated the rules for the transfer of goods prescribed by normative acts of export control regulations. The Ukrainian legislation envisages administrative and criminal liability for violations of the legislation in the field of international transfer of goods and norms of state export control.

The Ukrainian legislation defines the so-called term of the "document of warranty" that implies the written obligation of the authorized state bodies of Ukraine or a foreign state to confirm the end use of goods for the stated purposes.

Such documents are:

• International Import Certificate - is a document issued by the Authorized body of the importer country, confirming the obligation of the importer to carry out import into his country, and if such import is not carried out, not to send the goods to another country without the authorization of the said body;

• End-user certificate - is a document, in which the user specifies the place of final use and the purpose of the goods and undertakes that the goods will not be used in any purpose other than specified in the certificate, will not be transferred to other persons, and will not be re-exported without permission from the authorized agency, also takes other obligations regarding the imported goods in accordance with the contract and other requirements;

• Certificate of delivery to the place of destination - is a document issued by the authorized agency confirming that the goods referred to in it are delivered to this country.

For the purpose of ensuring the fulfillment of the requirements of normative acts regulating export control, entities carrying out international transfer of goods form an internal enterprise export control system (internal compliance programs).
Internal Enterprise Export Control System (internal compliance program) - is a unity of organizational, legislative, informational and other measures that must be established by the entrepreneurial entities, who seek permits from the cabinet to export and import goods containing military products and state secrets, or if these entities need general or open license or conclusion.

The Ukrainian Export Control Service carries out certification of internal enterprise export control systems (internal compliance programs) created by entrepreneurial entities and issues certificates of attestation.

In 2018, significant changes were made to Ukraine's export control system. In particular, on 19 October, Resolution No 1 of the cabinet of 11 January 2018 on "Amendments to the Rules of Implementation of State Control over the International Transfer of Dual-Use Goods" came into force, approving a common list of dual-use goods subject to state control over the international transfer. With this act, the five separate lists of dual-use goods were merged into one consolidated list.

Nowadays, Ukraine's general list of dual-use goods (as well as the Georgian list of dual-use goods) is compatible with the European general list of dual-use goods approved by the first annex to EU Council Resolution No 428/2009 of 5 May 2009[9].

1.4. Dissemination of strategic items and technologies contributed to the creation of WMD in various countries

"Nuclear Club" is an unofficial name of a group of states that possess nuclear weapons. These countries are: The USA (from 1945), Russia (from 1949), Great Britain (from 1952), France (from 1960), China (from 1964), India (from 1974), Pakistan (from 1998), and North Korea (from 2006). It is believed that Israel also possesses nuclear weapons.

The United States, Russia, Great Britain, France and China (the so-called nuclear five) are considered to be legitimate nuclear states, because they are member states of the Nuclear Non-Proliferation Treaty. India, Pakistan, North Korea and Israel - "Young" Nuclear Countries, whose nuclear programs still remain subject to concern for the international community.

1.4.1. India[10]

In 1947, India carried out for the first time control over exports of sensitive materials - monazite and thorium nitrate. Any export of these materials would be carried out in accordance with the explicit permission of the government of India.

India's nuclear program can be split into two parts: The Atomic Energy Program (the first nuclear power plant in 1969) and the Nuclear Weapons Development and Development Program (1974).

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[9] https://zakon.rada.gov.ua/laws/show/1-2018-%D0%BF#n2 (general lists)
https://zakon.rada.gov.ua/laws/show/86-2004-%D0%BF#n234

[10] https://www.armscontrol.org/ACT/2016_06/Focus/Obamas-India-Nuclear-Blind-Spot

India's desire to have nuclear weapons was caused by two reasons - a potential threat from a nuclear state, China, that sought to gain leadership in the region and a sharp confrontation with Pakistan, which led to numerous instances of armed confrontation (1947-1948, 1965, 1971).

The construction of the first 1 MW Indian Apsara Research Reactor started with the help of Great Britain in 1955. In September of that year, Canada agreed to provide a 40 MW research reactor. Later, in 1956, within the framework of the Peaceful Atom program, the USA agreed to supply 21 t of heavy water. Correspondingly, this led to the formation of the reactor's name Cirus (Canada-India Reactor, US). The Reactor could produce so-called "bomb plutonium" (enough for one to two bombs per year) and had high research capabilities.

The first nuclear power plant (capacity 420,000 kW) was built and put in operation in Tarapur in 1969. The Tarapur NPP, whose technical project was designed by General Electric, USA, was equipped with two heavy water reactors which, used nuclear fuel for enriched uranium.

Other nuclear power plants (Rajasthan, Madras, and Nagore) were equipped with natural uranium heavy water reactors (CANDU type), which were designed for the quality of the uranium available in the country.

By this time, India has already had sufficient scientific-technical potential for nuclear weapons and in 1968, Indian scientists started working on nuclear bomb in response to the test nuclear explosions by China in 1964-1966.

Preparations for the first nuclear test were a highly secretive process known to only a few statesmen, while the minister of defense was notified at the last moment.

In May 1974, India conducted the first secret test of nuclear weapons named Smiling Buddha and in 1998, a number of experimental explosions called Shakt.

It was the first use of nuclear energy for peaceful purposes to create weapons that produced new potential threats to the international community.

India is a member of three multilateral regimes of export control: The Missile Technology Control Regime (MTCR), Wassenaar Arrangement(WA) and Australia Group (AG). India has signed and ratified conventions on biological and chemical weapons, and is a member of The Hague Code of Conduct. India owned chemical weapons and voluntarily destroyed all its supplies in 2009. However, India did not sign agreements on the comprehensive prohibition of nuclear tests and non-proliferation of nuclear weapons, as it believes that these agreements are discriminatory and unfair.

India protects the so-called "without first use" nuclear policy and "minimal reliable retention" doctrine. In addition, India holds delivery systems - ballistic and continental missiles.

After India signed the Civil Nuclear Agreement with the USA in 2006, the Nuclear Suppliers Group, granted a waiver to the country in 2008, allowing India to access civilian nuclear technologies and fuel from other countries. After this waiver by NSG, India became the only country that is allowed to carry out nuclear commerce with other countries, in spite of its possessing nuclear weapons and not being a signatory to the NPT.

1.4.2. Nuclear History of Pakistan

At the end of 1948, Pakistan took an interest in nuclear science after India split in 1947. This was also due to tense relations with India, Afghanistan and the Soviet Union and the lack of energy.

Pakistan's first practical step in implementing a nuclear program was the establishment of a nuclear research center in Islamabad and in the aftermath, the development of the Peaceful Atom program in the 1960s. The United States-supported 5 MW power research light water reactor, which started functioning in 1965.

Pakistan signed agreements on the construction of a nuclear power plant and a heavy water factory with Canada in 1970 and with France in 1976.

The Canadian project was completed in Karachi in 1976 and put into operation, while the French project was frozen in 1978, after the completion of the construction of the first energy block of the nuclear power plant and heavy water factory in the Chashma city, when the nuclear ambitions of the Islamic Republic of Pakistan became clear. However, a number of French technological documents on nuclear fuel processing remained in the hands of the Nuclear Energy Commission.

Dr. Abdul Kadir Khan achieved the main breakthrough in Pakistan's nuclear program in 1975. Due to this, the country received projects and technologies of centrifuges for uranium enrichment.

The main resources of Pakistan's nuclear program were directed to the uranium enrichment project, using illegally obtained technologies of gas centrifuges of the European consortium URENCO (UK, Germany, and Netherlands).

The agreement in the field of nuclear research with China of 1986 greatly contributed to Pakistan's nuclear program. This cooperation enabled Pakistan to develop a program of creating a charge based on plutonium, while in the 1990s, with the help of Chinese specialists, Pakistan received the first heavy water reactor in the nuclear power plant of the Khushab city.

These circumstances, as well as the plutonium processing technology adopted from France in 1974-76, prepared a platform for Pakistan to produce plutonium that is needed to create modern and compact nuclear charges.

As a result of the work on the so-called "Islamic bomb", Pakistan already had 10 nuclear uranium-based charges and 1-5 plutonium-based charges in the late 1990s.

The 30-year work on nuclear weapons culminated in test explosions on 28-30 May 1998 in the Chagai polygon, Balochistan Province, which was the answer to India's nuclear power tests at the beginning of May 1998.

Pakistan's nuclear program is also reminiscent of the scandal linked to the creation of an illegal network of trade in nuclear materials and technologies by Abdul Kadir Khan, one of the founders of this program.

The international community was concerned when the first signs of the transnational "nuclear network" of mediators and companies led by Dr. Abdul Kadir Khan appeared. This network provided sensitive nuclear technologies to Iran, Libya and possibly other countries and non-state actors.

The story of "Khan's Case" began in 2002, when Pakistani President Musharraf launched an investigation into the activities of the segment of the army and special services that helped to create the Taliban movement in Afghanistan in the 1990s. In the process of the investigation, Pakistani and US special services discovered leakage of nuclear technologies to Pakistan's "black market". In the American press, there were reports that Pakistani officials handed over nuclear secrets to the Democratic People's Republic of Korea in exchange for Pyongyang's assistance in developing Pakistani missile technologies.

In 2003, Iran confessed towards the IAEA (International Atomic Energy Agency) that components for centrifuges for uranium enrichment had been bought in Pakistan. In 2003, two Pakistani specialists of nuclear physics were arrested for allegedly transferring nuclear technologies to Iran.

In December 2003, Libya provided IAEA with information about illegal supplies of special fissile materials and technologies from Pakistan. There was information about the so-called "key components" of Khan Nuclear Network. These were individual suppliers based in Germany, Malaysia, South Africa, Switzerland, Turkey, the United Kingdom and the United Arab Emirates. They were mediating between Khan and the buyer states.

On 23 December 2003, the Pakistani government officially recognized illegal transfers of nuclear technologies to other states. Speaking to Pakistani television on 4 February 2004, Abdul Kadir Khan acknowledged that he had been trading in nuclear materials for 20 years and supplied these materials to Iran and Libya. He denied having had any relations with North Korea. However, in April 2004, President Musharraf acknowledged that nuclear technologies were supplied to North Korea.

The second part of the "Khan's Case" is linked to its activities in the European Consortium of Uranium (URENCO) in The Netherlands. There are reports that he started creating a "nuclear network" while still working with URENCO in 1972-1976. According to Dutch court materials, Khan fled to Pakistan in 1976, taking with him URENCO drawings of G-1 and G-2 centrifuges.

1.4.3. Libya

The Libyan nuclear program is one of the examples of illegal acquisition of nuclear materials and technologies, which has resulted in international pressure and economic sanctions.

Libya started working in the 1980s to create uranium and plutonium bombs. In the 1970s, Libya acquired 1,200 tons of uranium concentrates and by 2004, it already had 2,263 tons of concentrate.

In 1984, Libya acquired a uranium processing plant presumably in Belgium and in 1985, 39 kg of uranium hexafluoride (in China or in the USSR). During this period, there were several attempts to buy or build a strong reactor, but it proved to be impossible because of the sanctions against Libya in 1988.

In 1995, the government decided to accelerate the creation of nuclear weapons and purchased the first 200 pieces of centrifugal uranium from Pakistan in 1997.

Soon, 12 km away from Tripoli, in the Janzour factory, Libya began to prepare for the production of its own centrifuges. In 2002, the installation of centrifuges started in Al Hasan. Libya received uranium hexafluoride (2 tons) from North Korea via Pakistan in 2001. The amount was sufficient to

produce one nuclear explosive device. At the same time, Libya received Chinese technological drawings for nuclear bombs from Pakistan. In 2002, Libya again bought 10,000 centrifuges from Pakistan.

In October 2003, a ship carrying parts of the centrifuge from Malaysia to Libya was detained in the Mediterranean Sea.

By the end of 2003, the nuclear program was carried out in 10 Libyan facilities.

However, due to insufficient development of scientific-technical and technological basis, Libya failed to use materials and equipment independently and to achieve significant progress in the field of producing nuclear weapons.

On 19 December 2003, after secret negotiations with the United States and Great Britain, Libya refused to implement a massive program of weapons of mass destruction (with companies from South Africa, Switzerland, Singapore, United Arab Emirates and Turkey participating) and agreed to destroy relevant materials, equipment and documentation. Subsequently, after numerous inspections of Libyan objects, the IAEA confirmed the absence of material necessary for producing nuclear bombs in the country.

1.4.4. Nuclear Program of the Peoples' Democratic Republic of North Korea (PDRNK)

It is often believed that the North Korean nuclear program was launched in 1952, when the decision was made to establish the Nuclear Energy Research Institute.

In 1956, the PDRNK and the USSR signed an agreement on the training of nuclear specialists. According to some estimates, 300 engineers were trained in 1990 within the framework of this agreement.

The real creation of nuclear infrastructure started in the 1960s.

In 1959, the PDRNK signed agreements with the USSR and China on cooperation in the field of nuclear energy use for peaceful purposes and began the construction of the nuclear scientific research center in Yongbyon. In 1965, the Soviet reactor IRT-2000 of 2 MW capacity and with neutron water-beryllium reflector was installed there. It used more enriched uranium as a fuel.

In 1993, representatives of the PDRNK informed IAEA inspectors that 300 mg of plutonium was allocated in the IRT-2000 in 1975.

The construction of another nuclear reactor with the capacity of 50 MW began in Yongbyon in 1985. The construction of a reactor of the estimated capacity of 200 MW began in Tongchon region. According to expert estimates, these reactors have dual purpose: Generation of electricity and receipt of bomb quality plutonium.

In the early 1970s, work began to create nuclear weapons in North Korea.

In 1974, the PDRNK became a member of the International Atomic Energy Agency and as a member, gained Calder Hall Reactor Schemes of Atomic Power Station at Sellafield Atomic Complex (the complex was generating bomb plutonium, nuclear fuel, recycling irradiated nuclear fuel). (It was the

so-called Magnox type reactor using natural metal uranium as nuclear fuel, graphite as the deterrent and a thermal-carbon dioxide as the thermal conductor). In the same year, Pyongyang appealed to China for the creation of a nuclear weapon and China opened access to its polygons to North Korean specialists.

In 1979/1980, the PDRNK began the construction of an air graphite nuclear reactor, which was put into operation in 1986. In Korea, this reactor is called an experimental energy nuclear reactor. Its capacity is 5 MW, and heat - from 20 to 30 MW. These types of reactors were used in Great Britain to obtain plutonium and electricity.

The PDRNK signed a non-proliferation treaty in April 1985 due to pressure from the USSR, cherishing hopes to construct a nuclear power plant. It also signed a contract for the construction of a VVER-440-type lightweight four-reactor nuclear power plant in North Korea.

In 1990, this agreement was revised and it was decided to install three more powerful VVER-640-type reactors instead of four. The contract was also signed on the receipt of heat exchangers in an estimated amount of 185,000 dollars from the Soviet Union.

After the USA announced the withdrawal of tactical nuclear weapons from South Korean territory in June of the same year, the IAEA started a series of inspections of the North Korean sites. In 1992-1994, six inspections were carried out, raising certain suspicions and concerns in the IAEA.

In February 1993, the Minister of Atomic Energy of the PDRNK refused to hold a so-called IAEA special inspection and on March 12, Korea declined the membership of the non-proliferation treaty. On 13 June 1994, the PDRNK quit the International Atomic Energy Agency. These events are also known as "North Korean Nuclear Crisis".

According to classified data, US President Bill Clinton and Defense Minister William Perry discussed in 1994 launching a missile strike on the Yongbyon reactor. However, the strike was aborted, because such an attack could have led to large-scale war and numerous human victims. The US signed a Framework Agreement with North Korea, which assumed the obligation to renounce the construction of uranium enrichment enterprises and plutonium extraction. In response, the USA assumed the obligation to build two more powerful reactors, which would be unable to produce plutonium, instead of the 5 MW Yongbyon reactor.

However, relations between the two countries were strained and the terms of the agreement were not fulfilled. On 12 December 2002, the PDRNK officially announced the expansion of its nuclear program and the expulsion of IAEA inspectors. According to the Central Intelligence Agency, the PDRNK had accumulated from 7 to 24 kg of bomb plutonium by the end of 2002.

On 10 January 2003, the PDRNK officially quit the Nuclear Non-Proliferation Treaty.

The PDRNK possesses a significant number of military and nuclear weapons as well as chemical and biological weapons. As of 2003, the PDRNK was no longer a member of the NPT. Moreover, since 2006, this country has been subject to a number of sanctions for conducting nuclear tests (in 2006, 2009, 2013, 2016 and 2017).

1.4.5. Nuclear Program of Iran

Shah Mohammed Reza Pahlavi launched the development of the Iranian nuclear program in the period of Iran's modernization that is also known as White Revolution.

Within the frameworks of Eisenhower's Peaceful Atom program, Iran and the USA signed an agreement on cooperation in the field of peaceful use of nuclear energy on 5 March 1957. In 1958, Iran became a member of the International Atomic Energy Agency.

In 1963, Iran joined the agreement on the prohibition of testing nuclear weapon in the atmosphere, space and underwater, signed by the USSR, the United States and Great Britain.

In 1967, the American 5 MW research reactor with 5.5 kg of highly enriched uranium was put into operation at the Nuclear Research Center set up with the University of Tehran. That same year, the United States provided the center with plutonium for research purposes and so-called "hot cameras", which allowed getting about 600 gr of plutonium per year.

This was a basis of the scientific-technical development of Iranian nuclear energy.

On 1 July 1968, Iran signed a treaty (which was ratified in 1970) on non-proliferation of nuclear weapons, which envisaged the use of nuclear energy only for peaceful purposes.

In 1974, Iran's nuclear energy company bought uranium enrichment fusion plant shares in Tricastin, France, for 1 bn dollars from the Eurodif international consortium (consisting of the Spanish company ENUSA, the Belgian company Synatom and the Italian company ENEA). In addition, Tehran obtained the right to purchase the factory's products and full access to the consortium's enrichment technologies. In 1974, the construction of Iran's second nuclear research center began in Isfahan. At the same time, French specialists started training Iranian specialists. In addition, the placement of a recycling research reactor for used nuclear fuel was planned for the 1980s.

The shah was overthrown in the Islamic Revolution in Iran in 1979 and the new government suspended the nuclear program.

A few years later, the government restored the nuclear program and a research center was created in Isfahan together with a heavy water research reactor with the help of China. Iran continued to obtain uranium, negotiating at the same time with Swiss and German companies on the procurement of uranium enrichment and heavy water technologies. Iranian physicists visited the Amsterdam Institute of Nuclear and High Energy Physics and the Petten Nuclear Center in the Netherlands.

In parallel, Iran cooperated with the USSR in the construction of nuclear power plants in 1992-2003.

In 2002-2003, the USA accused Iran of financing terrorists and attempting to secretly make nuclear weapons.

In 2002, the International Atomic Energy Agency inspectors managed to discover uranium enrichment centrifuges in Iran.

On 23 December 2006, the United Nations Security Council, based on reports from the Director General of the International Atomic Energy Agency, unanimously adopted Resolution 1737 (2006) on imposing sanctions on Iran, which rejected to halt the nuclear program, in particular, uranium

enrichment work for peaceful purposes. According to this resolution, all countries around the world were forbidden to provide Tehran with materials, equipment and technologies that could be used to develop Iran's nuclear and missile programs.

On 14 July 2015, a joint comprehensive plan of action (JCPOA) was adopted by the high-level representatives from China, France, Germany, the Russian Federation, the United Kingdom, the United States, and the Islamic Republic of Iran for resolving the problems of the Iranian nuclear program. According to the document, a large portion of enriched uranium was to be exported from Iran. In addition, the Fordow uranium enrichment factory was to have only the functions of a nuclear research institute of nuclear physics without additional capacity to enrich uranium. The International Atomic Energy Agency was to be allowed access to all nuclear facilities within the next 20 years to enable it to make sure that Iran's nuclear program was implemented only for peaceful purposes. It was not envisaged to dismantle any nuclear facility, sanctions against Iran were to be lifted and completely abolished in the course of time.

On 20 July 2015, the UN Security Council unanimously adopted Resolution 2231 (2015), which approved the joint comprehensive plan of action (JCPOA).

The withdrawal of the USA from the JCPOA on 8 May 2018, left the future of the implementation of the Action Plan vague.

Iran is not a member of the Missile Technology Control Regime (MTCR) and, despite this, is actively working on the development, acquisition and deployment of a long-range ballistic missiles and space missile capabilities. The scope and status of Iran's chemical and biological activities are unknown, but according to the latest estimates of Western intelligence, Iran maintains its chemical and biological combat weapons program.

Currently, Iran has a full cycle of nuclear fuel production, including the mining of uranium and its transformation and enrichment facilities. Iran's wide enrichment program that could be used to produce highly enriched uranium for the production of nuclear weapons is a particularly controversial topic.

1.4.6. Threat not only from states, but also from terrorists

Terrorist organizations, such as the Islamic State, are actively trying to seize weapons of mass destruction. It should be noted that on a small scale, they have already used this weapon in Syria and Iraq. Besides, the organization actively searched for people, who have relevant technical knowledge and experience in developing relevant programs.

SECTION 2: (Overview of non-proliferation regimes)

2.1. Nuclear Suppliers Group (NSG)[11]

This is a group of countries possessing nuclear weapons. They seek to promote the non-proliferation of nuclear weapons, controlling materials, equipment and technologies that can be used to create nuclear weapons.

The Nuclear Suppliers Group was created in 1975 in response to the testing of nuclear weapons by India in 1974, when the plutonium created in a Canadian nuclear reactor that operated on US heavy water was used. The Indian "nuclear explosion" has shown that nuclear materials and technologies acquired for peaceful purposes can be used to create nuclear weapons.

Today NSG unites 48 countries.

To become a member of the NSG, a country must satisfy the following criteria:

- Be able to supply products listed in the guidelines of the Nuclear Suppliers Group;
- Observe guideline principles;
- Create a legal framework for export controls, which will comply with the guidelines;
- Comply with the Treaty on the Non-Proliferation of Nuclear Weapons, Pelandaba, Rarotonga, Tlatelolco, Bangkok, Semipalatinsk or other equivalent international agreements (one or more) and fully implement such agreements (treaties);
- Support international efforts to prevent the proliferation of weapons of mass destruction and their delivery systems.

The Nuclear Suppliers Group has developed guidelines consisting of Part 1 and Part 2, setting forth rules for the transfer of nuclear materials and dual-use items for peaceful purposes so that such transfers do not lead to the creation of weapons of mass destruction.

In 1978, the International Atomic Energy Agency published Part 1 of the guidelines as a document IAEA INFCIRC/254.

Part 2 of the guidelines of the Nuclear Suppliers Group regulates the export of goods specifically designed or prepared for use in the nuclear field, such as: nuclear materials, nuclear reactors and related equipment, non-nuclear materials for reactors, equipment and apparatus for the development, enrichment and storage of nuclear materials, also production of nuclear fuel and heavy water; and the technology and software associated with each of the aforementioned.

These elements are known as "elements of the trigger list".

Part 2 of the guidelines of the Nuclear Suppliers Group regulates the export of items related to the creation of nuclear weapons, items that can play an important role in the nuclear fuel cycle (production cycle, including all stages of extracting fuel from radioactive waste), and these items can

[11] http://www.nuclearsuppliersgroup.org/en/
http://www.nuclearsuppliersgroup.org/en/about-nsg/nsg-faq

have non-nuclear application. For example, used in industry. Such items are known as "dual-use items".

Part 2 of the guidelines of the Nuclear Suppliers Group (guidelines for dual-use items), was created in 1991-1992 after it became clear that the existing export control rules could not prevent one of the states parties to the Non-Proliferation Treaty form implementing an underground nuclear weapons program, which in turn led to further UN actions. A significant part of the ground-based nuclear weapons program included the purchase of dual-use items and their use to create elements of the "triggers list."

In 1992, the International Atomic Energy Agency published Part 2 of the guidelines as an information circular of the IAEA INFCIRC / 254, part 2.

2.2. Missile Technology Control Regime (MTCR)[12]

The missile technology control regime (MTCR) is an informal and voluntary association of countries united to prevent the illegal proliferation of weapons of mass destruction. The MTCR was founded in 1987 by Canada, France, Germany, Italy, Japan, the United Kingdom and the United States. Since then, the countries participating in the MTCR have grown to 35, and each country has equal rights under this regime. The MTCR was created to counter the growing threat of weapons of mass destruction, especially nuclear, biological and chemical weapons.

After the tragic events of 11 September 2001, it became obvious that measures must also be taken to reduce the risk of weapons of mass destruction falling into the hands of terrorist organizations and individuals. One of the ways of combating such threats is to establish thorough control over the transfer of equipment, materials and relevant technologies that can be used in the transfer of delivery systems of such weapons.

The MTCR follows the general export policy guidelines ("Missile Technology Management Guidelines"), which are used with respect to the common list of controlled goods (Appendix to the management of missile technology, which includes equipment, software and technology).

The MTCR does not make collective export licensing decisions. Instead, each country assumes the responsibility to protect the "guidelines" in accordance with national laws and practices. All decisions of the MTCR are taken on the basis of a general consensus, and partner countries regularly exchange information on licensing national export policies in the context of the general objectives of the regime.

The "Appendix to the MTCR, which includes equipment, software and technology," consists of two parts: "Category I" and "Category II" technical units, which include a wide range of military and dual-use items for the development, production and operation of missiles. The appendix is periodically

[12] http://mtcr.info/wordpress/wp-content/uploads/2017/10/MTCR-Handbook-2017-INDEXED-FINAL-Digital.pdfhttp://mtcr.info/

updated to clarify and take into account modern fast-growing technologies, and more stringent restrictions are established.

This technical unit includes integrated missile systems (including ballistic missiles, rocket launchers and sound rockets, cruise missiles, radio-controlled airplanes, target and reconnaissance airplanes) capable of delivering at least 500 kg payload to a range of at least 300 km.

Technical units of "Category II" include integrated missile systems (including ballistic missiles, rocket launchers and sound rocket, cruise missiles, radio-controlled airplanes, target and reconnaissance airplanes) able to fly at a maximum range of 300 km and not included in "Category I".

Technical units of "Category II" include a wide range of equipment, materials and technologies, most of which have a purpose different from the system of delivery of weapons of mass destruction. Regime member countries have an easier approach to "Category II" technical units, however, according to the agreement, the transfer of such units is limited.

Dialogue regarding potential membership in this control regime is conducted by the chairman of the MTCR. The decision to admit a new member is made by partner countries unanimously on the basis of consensus and taking into account how the country implements non-proliferation principles, whether it has an effective legal framework for export controls, and whether the regime's guidelines and procedures are introduced at the national level.

2.3. Australia Group (AG)[13]

The Australia Group (AG) is an informal association of countries whose activities are aimed at minimizing risks of the spread of chemical and biological weapons (CB weapons), as well as the delivery of various types of materials by exporting countries or countries through which territories these materials are delivered. AG member states hold annual meetings to discuss ways of improving the efficiency of their regulations and export licensing in order to prevent possible distribution of CB materials by perpetrators.

The main objectives of the AG member states are to establish more stringent control measures so that the export licensing system can control the use of certain categories of chemicals and, biological agents, technologies and dual-use items that can be used for the production and distribution of chemical and biological weapons.

All countries participating in the Australia Group are also members of the Chemical Weapons Convention (CWC) and Biological Weapons Convention (BWC) and support international efforts to protect the world from the proliferation of CB. Today, there are 41 countries in the Australia group and the European Commission, and Kazakhstan is awaiting membership.

To become a member, a country must submit an application to the AG chairman in writing and indicate that the country will follow the guidelines and adopt control lists. The country does not require the consent of the AG member states for membership.

[13] https://australiagroup.net/en/index.html

In early 1984, an investigation team discovered the use of chemical weapons in Iraq during the Iran-Iraq war, which contradicted the 1925 Geneva Protocol. It was also found that Iraq bought chemicals and appropriate materials necessary for the production of chemical weapons through completely legal channels of trade.

A set of control systems have been introduced in some countries in this regard to control the export of chemicals and materials that can be used to manufacture chemical weapons.

However, the controls introduced by various countries proved to be inefficient, and it became clear that some non-state actors are trying to find ways to avoid these systems. In this situation, the AG proposed to the countries, on whose territories export controls are exercised, to spend more efforts on export management and comply with the agreement on national rules for export licenses, as well as improve the efficiency of cooperation in this area.

The first meeting of these countries, the union of which was later called the Australia Group, was held in Brussels in June 1985. The fourteen countries that participated in this meeting and the European Commission agreed on the need to explore new export monitoring opportunities and ways of increasing their efficiency with regard to the non-proliferation of chemical weapons.

In the 1990s, due to the exposed facts of the use of dual-use items imported for random purposes, which were instead used for biological weapon programs, the AG countries imposed restrictions on the exports of certain biological agents. New technologies and equipment that can be used to manufacture or use chemical or biological weapons were added to the control lists of substances and materials developed by AG to restrict exports.

Currently, all states parties are taking certain measures to restrict the export of 65 types of chemicals that can be used as a source of chemical weapons. Mandatory export licenses are applied in the following areas:

- Chemical production facilities and dual-use equipment and related technologies;
- Plant pathogens;
- Animal pathogens;
- Biological agents; and
- Dual-use biological facilities.

These points are the basis of a common AG control list, which is compiled as a result of consultations between member states and is periodically adjusted to ensure improved efficiency. AG member states call on all countries to take the necessary measures to prevent the participation of enterprises located on their territories in the production of chemical and biological weapons.

In addition, although the guidelines of the Australian Group are consistent and comply with the requirements of the conventions on the prohibition of chemical and biological weapons, the implementation of these provisions is also mandatory for all other states to ensure compliance with the requirements of UNSCR 1540 (2004).

2.4. The Wassenaar Arrangement[14]

The world remembered the years 1946-1991 as a period of the Cold War, which meant global geopolitical, military, economic and ideological confrontation between the Soviet Union and its allies and the United States and its allies. This confrontation was not a genuine war, but an ideological disagreement between differing political systems.

The Cold War was accompanied by competition for advantages in the field of conventional and nuclear weapons, which periodically threatened the world with a third world war (for example, the 1962 Caribbean crisis/Cuban missile crisis).

In 1949, 17 states created a Coordinating Committee for Multilateral Export Controls (COCOM) to control the export of strategic goods to the Soviet Union and other socialist countries. Five non-member countries expressed support for this organization with regard to export controls. To weaken the technological development of the so-called Eastern bloc, COCOM approved a list of strategic goods and technologies that cannot be exported to the so-called Eastern Bloc countries, and also introduced restrictions on the use of permitted goods.

In the subsequent period of "transformation" of the Soviet Union and its collapse, COCOM's approaches to the countries of the CIS and Eastern Europe were somewhat weakened, and on 31 March 1994, COCOM completed its work. In addition, Member States agreed to create a more global system for controlling the export of conventional weapons, dual-use goods and technologies in order to ensure regional and international security[15].

This decision was made at a high-level meeting in Wassenaar (a village near The Hague, the Netherlands) on 19 December 1995, when the Wassenaar Arrangement (WA) was founded and it became known after the announcement at the Peace Palace in The Hague. Today, the Wassenaar Arrangement is made up of 42 countries that make decisions based on general consensus.

The language of the WA is English.

The basis of the WA and the obligations of its member states with respect to the control of conventional arms and dual-use goods and technologies are determined by the following document "Guidelines & Procedures, including the Initial Elements".

WA control lists consist of two parts

1. A list of dual-use items and technologies that can be used to create weapons and military equipment (the Basic List), which is divided into two parts - a Sensitive List and a Very Sensitive List of items and technologies: https://www.wassenaar.org/app/uploads/2018/01/WA-DOC-17-PUB-006-Public-Docs-Vol.II-2017-List-of-DU-Goods-and-Technologies-and-Munitions-List.pdf
2. Munitions List: https://www.wassenaar.org/app/uploads/2017/12/Stand_Alone_Munitions_List_WA_2017.pdf

[14] https://www.wassenaar.org/

[15] https://www.wassenaar.org/docs/IE96.html

The basic list includes nine categories of products and technologies: Special materials and related equipment; material processing; electronics; computers; telecommunications and information security; sensors and lasers; navigation and avionics; marine; aerospace and propulsion.

A new member to the Wassenaar Arrangement is to be admitted with the consent of all member states by consensus. To become a WA member, a country must engage in the production of military items and industrial equipment used to create military products or export such products, and also must recognize non-proliferation policies, including the NSG, MTCR, AG, NPT, CWC, BWC and other rules and must have an efficient export control system.

The Wassenaar Arrangement munition list was included in the Common Military List of the European Union 2008/944 / CFSP of December 8, 2008, which sets out the general rules governing export control of military items and is legally binding.

2.5. The Common Military List of the European Union 2008/944 / CFSP covers 22 categories of military items:

ML1. Smooth-bore weapons with a calibre of less than 20 mm, other arms and automatic weapons with a calibre of 12,7 mm (calibre 0,50 inches) or less and accessories, as follows, and specially designed components therefor.

ML2. Smooth-bore weapons with a calibre of 20 mm or more, other weapons or armament with a calibre greater than 12,7 mm (calibre 0,50 inches), projectors and accessories, as follows, and specially designed components therefor:

ML3. Ammunition and fuze setting devices, as follows, and specially designed components

ML4. Bombs, torpedoes, rockets, missiles, other explosive devices and charges and related equipment and accessories, as follows, and specially designed components

ML5. Fire control, and related alerting and warning equipment, and related systems, test and alignment and countermeasure equipment, as follows, specially designed for military use, and specially designed components and accessories

ML6. Ground vehicles and components

ML7. Chemical or biological toxic agents, 'riot control agents', radioactive materials, related equipment, components and materials

ML8. 'Energetic materials', and related substances

ML9. Vessels of war (surface or underwater), special naval equipment, accessories, components and other surface vessels.

ML10. 'Aircraft', 'lighter-than-air vehicles', Unmanned Aerial Vehicles ('UAVs'), aero-engines and 'aircraft' equipment, related equipment, and components, as follows, specially designed or modified for military use:

ML11. Electronic equipment, 'spacecraft' and components.

ML12. High velocity kinetic energy weapon systems and related equipment, as follows, and specially designed components

ML13. Armoured or protective equipment, constructions and components

ML14. 'Specialised equipment for military training' or for simulating military scenarios, simulators specially designed for training in the use of any firearm or weapon specified by ML1 or ML2, and specially designed components and accessories .

ML15. Imaging or countermeasure equipment, as follows, specially designed for military use, and specially designed components and accessories

ML16. Forgings, castings and other unfinished products

ML17. Miscellaneous equipment, materials and 'libraries', as follows, and specially designed components

ML18. 'Production' equipment and components

ML19. Directed Energy Weapon (DEW) systems, related or countermeasure equipment and test models, as follows, and specially designed components

ML20. Cryogenic and 'superconductive' equipment, as follows, and specially designed components and accessories

ML21. 'Software'

ML22. 'Technology'

Decree of the Government of Georgia №394 of June 13, 2014 (annex I) on the approval of military items control list, is similar to the common military list of the European Union 2008/944 / CFSP.

Export, import, transit, brokerage services and technical assistance of goods, software and technologies included in the military items control list are subject to license control in accordance with the provisions of the Law of Georgia "On Control of Military and Dual use Items".

2.6. The Arms Trade Treaty (ATT)[16]

All over the world, the well-being of people is threatened not only by the proliferation of weapons of mass destruction, but also by the illegal use of small arms and light weapons and firearms, which daily kills many people.

In the late 1980s, celebrities and Nobel Prize winners teamed up against this threat, expressing concern about the uncontrolled arms trade and the impact of such unregulated trade on "Human Security".

In 2001, the United Nations Conference adopted The UN Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons (PoA) , which did not have a legally binding mechanism.

In December 2006, on the path to Arms Trade Treaty the UN General Assembly adopted resolution 61/89 "Towards an arms trade treaty: establishing common international standards for the import, export and transfer of conventional arms".

[16] https://www.un.org/disarmament/convarms/att/

On April 2, 2013, the UN General Assembly adopted a resolution on the Arms Trade Treaty (ATT) with 154 votes (three voted against and 23 abstained). The treaty entered into force on December 24, 2014, 90 days after the 50th ratification.

The Arms Trade Treaty (ATT) (hereinafter referred to as the "Treaty" or "ATT") obliges Member States to control arms exports, refrain from violating the arms embargoes and ensure that arms are not ultimately used for violations of human rights and terrorism.

In addition, ATT recommends that Member States to apply the provisions of the Treaty to the most wide possible range of conventional weapons. For the purposes of the Treaty, international trade includes export, import, transit, transhipment and brokerage services.

The Arms Trade Treaty includes:

a. Battle tanks
b. Combat armored vehicles
c. Large caliber artillery systems;
d. Fighter jets;
e. Combat helicopters;
f. Military ships;
g. Rockets and missile launchers;
h. Small and light weapons.

ATT obliges Member States:

- To create and use a national control system and a national control list, for the effective implementation of the provisions of this Treaty.

- To create and apply a national control system in order to regulate the export of ammunition and to apply the export control provisions specified in this Treaty in the process of issuing a permit for the export of ammunition;

- To create and to apply a national system of control over parts and components of conventional weapons when they are exported in such a way that it is impossible to collect weapons, regulate export and apply the export control provisions specified in this Treaty when issuing a permit for the export of ammunition.

In accordance with article 6 of the Treaty, the member state does not allow the transfer of conventional weapons, ammunition, parts and components if :

- Such a transfer violates the measures introduced by the UN Security Council in accordance with Chapter VII of the UN, in particular the state's obligations with respect to the arms embargoes and international treaties relating to the transfer and illicit trafficking of weapons.

- During the decision-making process on granting permit, there is a reliable information that these weapons and ammunition will be used in acts of genocide, crimes against humanity and for committing acts that violate the 1949 Geneva Convention, as part of an attack on civilians and civilian objects, or other war crimes.

If export is not prohibited in accordance with this Treaty, each exporting member state, prior to issuing a permit, assesses whether conventional weapons intended for export contribute to peace or security, or opposite, harm them and/or are used for such acts that are considered a crime in accordance with international humanitarian law, international human rights law, conventions and protocols on terrorism, transnational and organized crime, etc.

In addition, the exporting state should take into account the risk of the possible use of conventional weapons, ammunition, parts and components for gender-based violence or violence against women and children.

In accordance with the Treaty, each member state takes the necessary measures to regulate, where necessary and within its jurisdiction, the import, transit and transshipment of conventional weapons and brokerage services.

The Treaty is open for signature by any state and is subject to ratification, acceptance or approval by each signatory state. By the beginning of 2019, the Treaty comprised 96 states.

Georgia ratified this agreement by Decree №4696 of the Parliament of Georgia of December 23, 2015.

All of the above types of conventional weapons, ammunition, parts and components of conventional weapons are included in the national military items control list approved by the Government of Georgia by Decree №394 of June 13, 2014 (annex 1), and international trade with these items is carried out on the basis of permits for export, import, transit, brokerage services and technical assistance issued by the Ministry of Defense of Georgia.

2.7. Chemical Weapons Convention[17]

Chemical Weapons Convention is an Arms control treaty that bans the production, stockpiling and use of chemical weapons and their precursors. The full name of this Convention is the "Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction".

A committee of 18 states, which became a conference on disarmament issues in 1984, has been discussing the prohibition of chemical and biological weapons since 1968. In 1992, the conference submitted to the UN General Assembly an annual report containing the text of the Convention on the Prohibition of Chemical Weapons. On 30 November 1992, the General Assembly adopted the Convention, and on 13 January 1993, opened it for signing in Paris.

[17] https://www.cwc.gov/

The Convention came into force on 29 April 1997, 180 days after its ratification by the 65th member of the CWC - Hungary. By its content, the Convention complies with the 1925 Geneva Protocol. It is worth noting that of the 193 UN members, 190 countries are members of the CWC. Myanmar and Israel signed, but they did not ratify it. Angola, North Korea, Egypt and South Sudan have not signed the convention. The official accession of Syria took place on 13 October 2013.

The prohibition of chemical weapons, the implementation of the objectives and provisions of the convention and monitoring compliance with its requirements, dialogue and consultations between member states and the inspection of military and industrial facilities are carried out by the Organization for the Prohibition of Chemical Weapons - OPCW (hereinafter referred to as the organization).

The headquarters of the organization is located in The Hague. Its bodies are the conference of member states, the executive board and the technical secretariat.

The main requirements of the convention are:

- Prohibition of the production and use of chemical weapons;
- Elimination of chemical weapons production capabilities (or their use for other purposes);
- Destruction of stockpiles of chemical weapons (including stocks outside the territory of the countries);
- Mutual assistance and cooperation with the organization in case of the use of chemical weapons;
- Inspection by the organization of chemical facilities able to produce chemical weapons;
- International cooperation in the use of chemicals for peaceful purposes in relevant areas.

The chemicals in the annexes to the convention that can be used for chemical weapons are divided into categories: List 1 includes chemicals that were manufactured, assembled or used as chemical weapons and that pose high threats (for example, lewisite agents, mustard gas, ricin, saxitoxin and all nerve agents). States are prohibited from having more than 1 ton of these substances, and more than 100 grams of such a substance must be declared to the organization. These substances have a very limited range of use for peaceful purposes. For example, nitrogen mustard is used to treat certain forms of cancer.

List 2 includes chemicals that can be used as precursors for List 1 chemicals, posing significant risks to the implementation of the objectives and key principles of the convention. The production of these chemicals must be declared to the organization. Export of these chemicals to non-member countries is prohibited. For example, thiodiglycol is typically not suitable for human consumption or for therapeutic use, but may be used for industrial or research purposes or as an ink solvent.

List 3 includes chemical substances that contain some dangerous threats. These chemicals are widely used in the chemical industry and can be produced in large quantities for commercial purposes if they are not prohibited by the Convention. Information on plants producing more than 30 tons of such chemicals is provided to the organization that has the right to inspect them. Export of these substances to non-member countries is restricted. Such substances are, for example, phosgene, which

is used in the production of many organic compounds, and triethanolamine, which is used in the production of detergents.

The work done by the OPCW yielded the following results:

- By 8 July 2010, 41,692 tons or 60.05% of registered chemical weapons and 45% (3.93 million tons) of ammunition for chemical weapons and containers were destroyed;
- Legislation completely prohibiting participation in the production of chemical weapons has been adopted by 50% of countries;
- Some countries have fully completed the process of destruction of stockpiled chemicals;
- The United States destroyed 75% of the stocks;
- Japan and China have announced the opening of plants for the destruction of chemicals left by the Japanese in China during World War II, and so forth.

Annex II-1: Correlation Table between substances listed in CWC annexes and Dual-Use Items Control List

The following substances from the annexes of the Chemical Weapon Convention are included in the Dual-Use Items Control List and thus are subject to export control			
Description	CAS №	ECCN	HS code
Annex 1			
Saxitoxin	35523-89-8	1C351.d.5.	3002 90 900 00
Ricin	9009-86-3	1C351.d.4.	3002 90 900 00
Methyl phosphonyl difluoride	676-99-3	1C350.4 (SEE ALSO MILITARY GOODS CONTROLS)	2931 39 200 00
O-Ethyl O-2-diisopropylaminoethyl methylphosphonite (QL)	57856-11-8	1C350.29 (SEE ALSO MILITARY GOODS CONTROLS)	2931 90 000 00
Annex 2			
Amiton: O,O-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate and corresponding alkylated or protonated salts	78-53-5	1C450.a.1	2930 90 850 00
PFIB: 1,1,3,3,3-Pentafluoro-2-(trifluoromethyl)-1-propene	382-21-8	1C450.a.2	2903 39 900 00
BZ: 3-Quinuclidinyl benzilate	6581-06-2	1C450.a.3 (SEE ALSO MILITARY GOODS CONTROLS)	2933 39

Precursors:			
Dimethyl methylphosphonate	756-79-6	1C350.3	2931 00 100 0
Methylphosphonyl dichloride	676-97-1	1C350.5.	2931 00 300 0
N,N-Dialkyl [methyl, ethyl or propyl (normal or iso)] phosphoramidic dihalides		1C450.B.2	2929 90 000 00
Dialkyl [methyl, ethyl or propyl (normal or iso)] N,N-dialkyl [methyl, ethyl or propyl (normal or iso)]- phosphoramidates		1C450.B.3	2929 90 000 00
Arsenic trichloride	7784-34-1	1C350.31	2812 10 990 00
Benzilic acid	76-93-7	1C350.32	2918 19 850 00
3-Quinuclidinol	1619-34-7	1C350.13	2933 39 990 00
N,N-Dialkyl [methyl, ethyl or propyl (normal or iso)] aminoethyl-2-chlorides and corresponding protonated salts		1C450. B.4	2929 90 000 00
N,N-Dialkyl [methyl, ethyl or propyl (normal or iso)] aminoethane-2-ols and corresponding protonated salts		1C450. B.5	2929 90 000 00
Thiodiglycol	111-48-8	1C350.1	2930 90 200 0
Pinacolyl alcohol	464-07-3	1C350.28	2905 19 000 00
Annex 3			
Phosgene: Carbonyl dichloride	75-44-5	1C450.4 (SEE ALSO MILITARY GOODS CONTROLS)	2812 10 940 00
Cyanogen chloride	506-77-4	1C450.5.	2853 00 500 00
Hydrogen cyanide	74-90-8	1C450.a.6	2811 19 200 00
Chloropicrin: Trichloronitromethane	76-06-2	1C450.7	2904 90 400 00
Precursors:			
Phosphorus oxychloride	10025-87-3	1C350.2	2812 10 110 00
Phosphorus trichloride	7719-12-2	1C350.7	2812 10 150 00
Phosphorus pentachloride	10026-13-8	1C350.38	2812 10 160 00
Triethyl phosphite	122-52-1	1C350.30	2920 90 400 00
Trimethyl phosphite (TMP)	121-45-9	1C350.8	2920 90 300 00
Dimethyl phosphite (DMP)	868-85-9	1C350.6	2920 90 200 00
Sulphur monochloride	10025-67-9	1C350.51	2812 10 910 00
Sulphur dichloride	10545-99-0	1C350.52	2812 10 930 00
Thionyl chloride	7719-09-7	1C350.9	2812 10 950 00
Ethyldiethanolamine	139-87-7	1C350.59	2922 19 100 00
Methyldiethanolamine	105-59-9	1C450.b.8	2922 19 200 00
Triethanolamine	102-71- 6	1C350. 46	2922 13 100 00

In addition, the following substances from the Annex 1 of the Chemical Weapon Convention is included in the Military Goods Control List and thus are subject to export, import and transit control:

Sarin (GB): O-Isopropyl methylphosphonofluoridate (CAS 107-44-8);
Soman (GD): O-Pinacolyl methylphosphonofluoridate (CAS 96-64-0);
Tabun (GA): O-Ethyl N,N-dimethylphosphoramidocyanidate (CAS 77-81-6);
VX: O-Ethyl S-2-diisopropylaminoethyl methyl phosphonothiolate (CAS 50782-69-9);
Sulphur mustards, such as:
2-Chloroethylchloromethylsulphide (CAS 2625-76-5);

Bis(2-chloroethyl) sulphide (CAS 505-60-2);
Bis(2-chloroethylthio) methane (CAS 63869-13-6);
1,2-bis (2-chloroethylthio) ethane (CAS 3563-36-8);
1,3-bis (2-chloroethylthio) -n-propane (CAS 63905-10-2);
1,4-bis (2-chloroethylthio) -n-butane (CAS 142868-93-7);
1,5-bis (2-chloroethylthio) -n-pentane (CAS 142868-94-8);
Bis (2-chloroethylthiomethyl) ether (CAS 63918-90-1);
Bis (2-chloroethylthioethyl) ether (CAS 63918-89-8);

Lewisites, such as:
2-chlorovinyldichloroarsine (CAS 541-25-3);
Tris (2-chlorovinyl) arsine (CAS 40334-70-1);
Bis (2-chlorovinyl) chloroarsine (CAS 40334-69-8);

Nitrogen mustards, such as:
HN1: bis (2-chloroethyl) ethylamine (CAS 538-07-8);
HN2: bis (2-chloroethyl) methylamine (CAS 51-75-2);
HN3: tris (2-chloroethyl) amine (CAS 555-77-1);

Chlorosarin: O-Isopropyl methylphosphonochloridate (CAS 1445-76-7);
Chlorosoman: O-Pinacolyl methylphosphonochloridate (CAS 7040-57-5).

SECTION 3: (UNSCRs, related documents and Georgia's Commitments and Obligations under Export Controls)

3.1. UNSCR 1540[18]

In accordance with the UN Charter VII, the UN Security Council Resolution 1540 (2004, UNSCR 1540) at the 4956th session on 28 April 2004. The resolution emphasized that nuclear, chemical, and biological weapons and delivery systems for such weapons are a threat to international peace and security, and it is necessary to involve all countries of the world in the struggle against this threat.

UNSCR 1540 (2004) is an important step towards curbing the spread of weapons of mass destruction. This is a world-famous document, which states that its full implementation requires international cooperation and support at the national, regional and global levels.

UNSCR 1540 (2004) discusses the threats posed by non-state actors trying to develop, acquire, produce or transport nuclear, chemical and biological weapons and means of their delivery, and emphasizes that every state should refrain from assisting such organizations by any means to prevent their involvement in such activities.

UNSCR 1540 (2004) states that each country must adopt and efficiently implement appropriate legislation that prohibits any non-state actors from acquiring, owning, developing, transporting or using nuclear, chemical and biological weapons and means of their delivery, particularly for terrorist activities. It also prohibits countries from trying to participate in any of the above actions as mediators, supporters or financiers. UNSCR 1540 calls on each country to take and use efficient measures to prevent the proliferation of nuclear, chemical and biological weapons and means of their transportation and related materials by introducing national control measures, and for this purpose:

a) Develop and implement necessary efficient measures for accounting and storing such materials used in the production, use or transportation;
b) Develop and implement necessary efficient measures of physical protection;
c) Develop and implement effective measures necessary for border control and law enforcement in accordance with national legislation and international law for identifying and suppressing illicit trafficking, as well as for identifying intermediaries and preventing them, including through international cooperation, if necessary.
d) Establish, improve, revise and maintain necessary efficient control over such goods for export and cross-border movement at the national level, including laws and regulations governing export, transit, trans-shipment and re-export, as well as controls regarding the provision of services such as financing and transportation for export and cross-border movement, which will facilitate distribution as well as control over the end user; apply necessary measures of criminal and civil liability for the violation of the aforementioned laws and other regulations in the field of export controls. In addition, the resolution recognizes the practical relevance of the control lists for achieving its goals and urges all member states to develop such lists as soon as possible.

[18] https://www.un.org/en/sc/1540/faq.shtml
https://www.un.org/disarmament/wmd/sc1540

The Resolution calls on states to:

- Promote multilateral agreements, to which they are parties, in order to fully implement them and strengthen them if necessary for the purpose of preventing the proliferation of nuclear, chemical or biological weapons;
- Adopt rules and regulations that ensure the fulfillment of obligations defined by key multilateral non-proliferation agreements at the national level, where this has not yet been done,
- Develop necessary methods for informing industrial and public circles about the duties defined by such legislation.

In addition, the Resolution defines the following terms:

Delivery systems - missiles and other unmanned systems that can carry nuclear, chemical or biological weapons designed specifically for such application.

Non-state actor- a natural or legal person who does not have legal authority from any state to carry out actions in accordance with the resolution.

Materials related to nuclear, chemical and biological weapons and their delivery systems - materials, equipment and technologies covered by relevant multilateral agreements and treaties or included in national control lists and can be used to design, build, manufacture and use nuclear, chemical and chemical weapons or biological weapons.

Civil society and the private sector can make a significant contribution to the implementation of Resolution 1540 (2004). The United Nations Office for Disarmament Affairs (UNODA) operating since 1998 has been pursuing nuclear disarmament and non-proliferation of weapons of mass destruction. The UNODA actively encourages partnerships with civil society, the private sector and industry to support national and international efforts to achieve the goals of the resolution.

In 2012, UNODA, together with Germany, held the first international, regional and sub-regional conference of industrial associations on issues covered by Resolution 1540 (2004) with industry associations and private companies in the nuclear, chemical, biological, financial, transport and aerospace industries participating.

In January 2013, together with Austria, the first civil society forum on UNSCR 1540 (200) was held. It was attended by 45 civil organizations from Asia, the Middle East, Eastern and Western Europe, South and North America, and North and South Africa.

3.2. Sanctions against Iran UNSCR 2231 (2015)[19]

Individual sanctions against Iran and collective economic sanctions were triggered by Iran's domestic or foreign policy, which was contrary to the interests of particular countries or threatened international security. For example, in 1950, after the nationalization of the Iranian "Anglo-Iranian Oil Company", Iran received a boycott of Iranian oil by the United Kingdom and the United States. In response to the seizure of diplomats of the US embassy in Tehran in 1979, the United States froze

[19] https://www.undocs.org/S/RES/2231(2015)

financial assets and gold reserves of Iran, and then US citizens and companies were forbidden to cooperate with Iranian companies. In addition, the development of missile and nuclear programs by Iran led to UN sanctions and tougher sanctions by the EU and the USA.

On 23 December 2006, the UN Security Council unanimously adopted Resolution 1737, which banned the supply of nuclear and missile materials and technologies to Iran, obliging all countries to freeze the financial assets of individuals and companies associated with the nuclear program (listed in the annex of the resolution). In addition, Iran was forced to stop the process of enriching uranium and the production of heavy water.

After the formation of a Joint Comprehensive Plan of Action by high-level representatives (E3/EC+3 group), the UN Security Council adopted Resolution 2231 (2015), which defined this plan and significantly weakened the sanctions imposed by the previous resolution, but certain restrictions on the supply of materials and technologies for Iran's nuclear and missile programs were maintained. The fulfillment of restrictions is mandatory for all states, including Georgia.

3.2.1. Joint Comprehensive Plan of Action (JCPOA)

The JCPOA, adopted by the Islamic Republic of Iran and the E3/EC+3 Group (China, France, Germany, the Russian Federation, United Kingdom, United States and EU high representative for foreign affairs and security policy), reflects a gradual approach and includes mutual commitment of the parties. The implementation of the JCPOA guarantees bringing the Iranian nuclear program to a peaceful course and, as a result, will lead to lifting sanctions imposed by the UN Security Council against Iran as well as multilateral and national sanctions.

According to this plan, Iran will never try to develop or acquire any nuclear weapons, to upgrade existing facilities (to turn the Fordow nuclear fuel enrichment plant and the ARK heavy water research reactor into research facilities and produce medical radioisotopes and industrial equipment), and work closely with the International Atomic Energy Agency (IAEA), and others. The E3/EC+3 countries are required to lift the sanctions related to finance, banking and insurance, oil, gas and petrochemistry, maritime, transport and other areas imposed on Iran because of its nuclear program. UNSCR 2231 (2015) supported this plan and determined the responsibilities of "all states" in annex B to the resolution on the implementation of the JCPOA.

3.2.2. Nuclear activities requiring the approval of the UN Security Council (consent)

As stipulated by paragraph 2 of Annex B of resolution 2231 (2015), all States may participate in and permit the following activities provided that approval is provided in advance, on a case-by-case basis, by the Security Council:

a. the supply, sale or transfer directly or indirectly from their territories, or by their nationals or using their flag vessels or aircraft to, or for the use in or benefit of, Iran, and whether or not originating in their territories, of all items, materials, equipment, goods and technology set out in INFCIRC/254/Rev.13/Part 1 and INFCIRC/254/Rev.10/Part 2 (or the most recent versions of these documents, as updated by the Security Council), as well as any further items if the State determines that they could contribute to reprocessing or enrichment-related or heavy water-related activities inconsistent with the JCPOA;

b. the provision to Iran of any technical assistance or training, financial assistance, investment, brokering or other services, and the transfer of financial resources or services, related to the supply, sale, transfer, manufacture or use of the items, materials, equipment, goods and technology described in subparagraph (a) above; and
c. acquisition by Iran of an interest in a commercial activity in another State involving uranium mining or production or use of nuclear materials and technology as listed in INFCIRC/254/Rev.13/Part 1, and such investment in territories under their jurisdiction by Iran, its nationals, and entities incorporated in Iran or subject to its jurisdiction, or by individuals or entities acting on their behalf or at their direction, or by entities owned or controlled by them.

States are to ensure that:

a. the requirements, as appropriate, of the Guidelines as set out in the referenced INFCIRC have been met;
b. they have obtained and are in a position to exercise effectively a right to verify the end-use and end-use location of any supplied item;
c. they notify the Security Council within ten days of the supply, sale or transfer; and
d. in the case of supplied items, materials, equipment, goods and technology listed in the referenced INFCIRCs, they also notify the IAEA within ten days of the supply, sale or transfer.

3.2.3. Nuclear activities not requiring the approval of the UN Security Council

Per paragraph 2 of Annex B of resolution 2231 (2015), an approval in advance by the Security Council shall not be required for the supply, sale, or transfer to Iran of:

1. equipment covered by Section B.1 of INFCIRC/254/Rev.13/Part 1 when such equipment is for light water reactors;
2. low-enriched uranium covered by A.1.2 of INFCIRC/254/Rev.13/Part 1 when it is incorporated in assembled nuclear fuel elements for such reactors; as well as
3. items, materials, equipment, goods and technology set out in INFCIRC/254/Rev.10/Part 2 only when for exclusive use in light water reactors.

States are nevertheless required to ensure that:

a. the requirements, as appropriate, of the Guidelines as set out in the referenced INFCIRC have been met;
b. they have obtained and are in a position to exercise effectively a right to verify the end-use and end-use location of any supplied item;
c. they notify the Security Council within ten days of the supply, sale or transfer; and
d. in the case of supplied items, materials, equipment, goods and technology listed in the referenced INFCIRCs, they also notify the IAEA within ten days of the supply, sale or transfer.

Furthermore, an approval in advance by the Security Council is not required for the supply, sale, or transfer of items, materials, equipment, goods and technology, and the provision of any related technical assistance, training, financial assistance, investment, brokering or other services, that is directly related to:

1. the necessary modification of two cascades at the Fordow facility for stable isotope production;
2. the export of Iran's enriched uranium in excess of 300 kilograms in return for natural uranium; and
3. the modernization of the Arak reactor based on the agreed conceptual design and, subsequently, on the agreed final design of such reactor.

UNSCR 2231 (2015) approved the creation of a special "procurement channel" in accordance with JCPOA, which will ensure the supply of materials, equipment, goods and technologies necessary for Iran's nuclear activities within JCPOA. Through this channel, the Security Council has the opportunity to consider the recommendations of the joint commission on the proposals of states regarding their participation in the activities mentioned in Paragraph 2 (b) of Annex B to UNSCR 2231 (2015), and to take decisions based on such recommendations.

This does not apply to the activities defined in Paragraph 4 of Annex B to UNSCR 2231 (2015) (transfers and activities related to ballistic missiles) and Paragraphs 5 and 6 (b) (transfers of weapons and related activities).

3.2.4. The procedure for the functioning of the Procurement Channel

The Security Council shall review and take action on proposals by States through the following steps:

a) States submit proposals directly to the Security Council;
b) The Security Council forward immediately such proposals to the Joint Commission Coordinator for the Joint Commission's review;
c) The Joint Commission, following the procedures specified in Annex IV of the JCPOA, provides recommendations to the Security Council on these proposals through the Coordinator of the Joint Commission within 20 working days (or if extended, within 30 working days – up to 45 working days if disagreement arises);
d) After five working days following receipt by the Security Council of such a recommendation, that recommendation shall be deemed to be approved by the Council unless the Council has adopted a resolution to reject it.
e) The Security Council notify the proposing State of its decision.

3.2.5. The procedure for submitting a proposal to the Security Council

States shall submit proposals to participate in or permit the activities set forth in paragraph 2 of Annex B of the resolution directly to the Security Council. States are encouraged to address these proposals to the Security Council Facilitator, His Excellency Mr. Marc Pecsteen de Buytswerve (Belgium), through their Permanent Missions to the United Nations at the Email address: SC-Resolution2231@un.org.

3.2.6. Procurement Channel Information

The Procurement Working Group of the Joint Commission has provided the following documents to give practical information to States on the Procurement Channel. States may wish to use this optional application form to provide all relevant information and will need end-use certification by the appropriate Iranian authority (see optional end-use certification for a template):

See the link for information on the approval mechanism for procurement, optional application form, End user certificate and explanatory card:

https://www.un.org/securitycouncil/content/2231/nuclear-related-transfers-and-activities-procurement-channel

3.2.7. 2231 (2015) Resolution on Missile Technology

UNSCR 2231 (2015) calls on Iran not to engage in the development of nuclear weapons delivery systems (ballistic missiles) and development activities for eight years from the date of receipt of JCPOA or until the International Atomic Energy Agency submits relevant conclusions and determines the obligations of countries regarding the supply of goods and technologies associated with the creation of delivery systems.

In accordance with Paragraph 4 of UNSCR 2231 (2015), each state can supply Iran by any means with goods and technologies or other materials, listed in the document S/ 2015/546[20], that can be used to create delivery systems; provide Iran with any equipment, professional and financial assistance and brokerage services, or grant Iran the right to conduct business on its territory, only if the Security Council agrees to each case of activity in advance.

3.2.8. 2231 (2015) Resolution on Conventional Arms

In accordance with Paragraph 4 of UNSCR 2231 (2015), if prior consent is obtained from the Security Council, each state can participate in the following activities: Using its own ships or aircraft either from its territory or through its own citizens, directly or indirectly sell or transfer warships, missiles or missile systems, or any battle tanks, military vehicles, large-caliber artillery systems, armored vehicles and artillery units (as set forth in the General Register of UN Regulations) for use in the interests of Iran or for Iran, including spare parts or technical and financial support and other services.

This restriction will be valid for five years, starting from the date of adoption of the JCPOA or until the submission of a relevant report by the IAEA.

[20] See the document on the link: https://undocs.org/en/S/2015/546

3.2.9. 2231 (2015) Resolution on Individuals

UNSCR 2231 (2015) (6 (c)) also imposes sanctions[21] on individuals and legal entities involved in developing Iran's nuclear program or participating in developing nuclear weapons and means of their delivery, encouraging all countries to freeze their financial and economic assets to prevent the transfer of such resources in any way and take all measures to prevent the transit or entry of these persons to their territory.

Currently, the "black list" includes 23 individuals and 61 legal entities.

In addition, the list is variable, since the Security Council has the right to add or exclude a person from the list.

Annex III-1: Correlation tables between ECCNs of national control list and relevant entries of INFCIRC/254/Rev.13/Part 1, INFCIRC/254/Rev.10/Part 2 and S/2015/546

The items listed in the documents referred to in UNSCR 2231 (2015) are included in the dual-use items control list approved by Georgian Government Decree No 394. For example, items on the control list in Paragraph 1.1 of INFCIRC/254/Rev.13/Part1 - correspond to the items classified under the ECCN 0C001* five-digit code and items in Paragraph 1.2. to 0C002* and so forth.

Products listed with a five-digit code on the national control list with 0 as the first digit or 2 as the third digit 2 are linked to the nuclear field, and in accordance to UNSCR 2231 (2015), the prior consent of the Security Council is required to export such goods and technologies to Iran.

ECCN	INFCIRC/254/Rev.13/Part 1		ECCN	INFCIRC/254/ Rev.10/Part 2	ECCN	S/2015/546
	Annex A of Information Circular	Annex B of Information Circular				
0A001*	2.1	1	1A227	1.A.1	9A004	1.A.1
0C003	2.2	2.1	6A203.c	1.A.2	9A012	1.A.2
0C004	2.2	2.2	2B207	1.A.3	9B115	1.B.1
0C001*	1.1		2B225	1.A.4	9B116	1.B.1
0C002*	1.2		2B209	1.B.1	9A119	2.A.1.a
0B006	2.3	3	2B201	1.B.2.	9A116	2.A.1.b.
0B005	2.4	4	2B206	1.B.3	9A105	2.A.1.c.2
0B001*	2.5	5	2B226	1.B.4	9A107	2.A.1.c.1
0B002*	2.5	5.2; 5.4	2B204	1.B.5	9A109.a	2.A.1.c.1
0B004*	2.6	6	2B116	1.B.6	7A117	2.A.1.d.
0B003	2.7	7.1	2B227	1.B.7	9A106.c	2.A.1.e
0B007	2.7	7.2	2A225	2.A.1	9A108.c	2.A.1.e
			1A225	2.A.2	9A115	2.A.1.f
			1A202	2.A.3	7B103	2.B.1.

[21] See the link to the UN sanctions List: https://www.un.org/ru/sc/2231/list.shtml
http://www.un.org/ru/sc/2231/pdf/information_on_%20procurement_channel.pdf

	1B231*	2.B.1	9B116	2.B.2.
	1B233	2.B.2	9A101	3.A.1.
	1C202.a	2.C.1.	9A011	3.A.2.
	1C230	2.C.2.	9A108.a	3.A.3.
	1C229	2.C.3.	9A117	3.A.4.
	1C225	2.C.4	9A106.d	3.A.5.
	1C227	2.C.5.	9A109.b	3.A.6
	1C210	2.C.7.	2A101	3.A.7
	1C238	2.C.6.	9A120	3.A.8.
	1C231	2.C.8	9A102	3.A.9.
	1C233	2.C.9	9A106.b	3.A.10.
	1C228	2.C.10.	9B115	3.B.1.
	1C216	2.C.11.	9B116	3.B.2.
	1C237*	2.C.12.	2B109	3.B.3.
	1C202.b.	2.C.13.	9C108	3.C.1.
	1C226	2.C.14.	9C108	3.C.2.
	1C234	2.C.15	1B115	4.B.1.
	1C240	2.C.16	1B115	4.B.2.
	1C235*	2.C.17.	1B117	4.B.3.a.
	1C232	2.C.18	1B118	4.B.3.b.
	1C236*	2.C.19.	1B119	4.B.3.c.
	1C241	2.C.20.	1B102	4.B.3.d.
	3A225	3.A.1	1C111	4.C.1. (see military control list)
	6A205	3.A.2.	1C111	4.C.2. (see military control list)
	2A226	3.A.3.	1C111	4.C.3. (see military control list)
	3A201.b	3.A.4.	1C111	4.C.4. (see military control list)
	3A226	3.A.5.	1C111.b	4.C.5.
	3A227	3.A.6.		
	2B230	3.A.7.		
	2B231	3.A.8.		
	2B233	3.A.9.		
	1B225	3.B.1.		
	2B228	3.B.2.		
	2B219	3.B.3.		
	1B201	3.B.4.		
	1B226*	3.B.5.		
	3A233	3.B.6.		
	1A226	4.A.1.		
	1B230	4.A.2		
	1B232	4.A.3.		

	1B229*	4.B.1.	
	1B228	4.B.2	
	6A202	5.A.1.	
	3A201.c.	5.B.1	
	2B232	5.B.2.	
	6A203	5.B.3.	
	6A225	5.B.5.a.	
	6A226	5.B.5.b.	
	3A230	5.B.6.	
	1B234	5.B.7.	
	1A007*	6.A.1.a	
	3A232	6.A.1.b	
	3A229	6.A.2.	
	3A228	6.A.3.	
	3A201.a	6.A.4.	
	3A231	6.A.5	
	3A234	6.A.6.	
	1C239	6.C.1.	
	ML8	6.C.1.	

3.2.10 JCPOA today

On May 8, 2018, President Trump announced the U.S. withdrawal from the JCPOA, as it had evidence that Iran continued to develop nuclear weapons in violation of the principles of this agreement, and in November restored sanctions against Iran and countries that traded with Iran.

On May 8, 2019, Iran announced that it would exceed the limit of low-enriched uranium defined by the agreement by 300 kg, and on July 7, 2019 announced that it would enrich uranium above 3.67%.

The International Atomic Energy Agency (IAEA) claims that Iran has increased the production of enriched uranium but cannot verify the quantity.

As a result, UN sanctions against Iran remain in accordance with UNSC resolution 2231 (2015), but it is expected that sanctions will be tightened if violations of this agreement are confirmed.

3.3. Sanctions imposed against North Korea[22]

In response to nuclear tests in the Democratic People's Republic of Korea (DPRK) in 2006, the United Nations, with Resolution S/RES/1718, initially imposed economic sanctions against the DPRK. This Resolution set up Committee 1718, which monitors the implementation of these sanctions.

With the adoption of Resolution S/RES/1718, the United Nations urged North Korea to stop nuclear testing and ordered all countries to take measures to prevent direct or indirect delivery of the following items, which could be carried out from their territory either through their own citizens or using their ships and aircraft:

[22] https://www.un.org/securitycouncil/sanctions/1718

- Military equipment, large-caliber artillery systems, rockets and missile systems, related materials, including spare parts and other items pointed out by Committee 1718 or the Security Council;
- Materials, goods, equipment and technologies listed in S/2006/814 (list of nuclear materials, equipment and technologies), S/2006/815 (list of materials, equipment, goods and technologies related to the ballistic missile program) and S/2006/816 (list of materials, goods, equipment and technologies related to chemical and biological weapons of mass destruction), or those items that can be used to create nuclear or other types of WMD and ballistic missiles;
- luxury items.

UNSCRS/RES/1718 prohibits North Korea from exporting the above-mentioned goods and buying these goods by any means. All countries are obliged to prevent the transfer of technologies associated with the creation of weapons of mass destruction and provision of any services, including those associated with such activities, and to freeze the monetary and other financial assets and economic resources of North Korea and its citizens[23].

In 2009, the Security Council adopted UNSCRS/RES/1874 (2009), which strengthened the arms embargo and called on all states to check their airports and ports, as well as open waters, air and sea transport carrying goods for North Korea and also to seize and destroy them, if this cargo is possibly connected with the North Korean nuclear program.

In response to the launch of the satellite Kwangmyongsong-3 in January 2013 and the third nuclear explosion carried out by the DPRK, UNSCRs 2087 (2013) and 2094 (2013) were adopted, which tightened the sanctions imposed by previous resolutions restricting remittances to the DPRK from international financial systems.

In response to the fourth nuclear explosion in 2016, the Security Council adopted UNSCR 2270 (2016), which banned the export of gold, vanadium, titanium and rare metals from the DPRK to the UN member states, as well as the export of North Korean coal and iron, except when it is necessary for the adoption of livelihood for Korea. The export of copper, zinc, nickel and silver was prohibited in accordance with UNSCR 2321 (2016).

With the adoption of UNSCR 2371 in August 2017, export of coal, iron, lead and seafood from the DPRK was completely banned, and new restrictions were imposed on the DPRK Foreign Trade Bank, and it was also forbidden to increase the number of North Korean workers to other countries. UNSCR 2375 (2017) banned the import of oil and petroleum products to North Korea from the UN member states, as well as the creation of joint ventures with Korean capital and the export of textiles and

[23] See S/RES/1718 at the link below:
https://www.undocs.org/S/RES/1718%20(2006)
https://www.un.org/securitycouncil/sanctions/1718
See the List of Nuclear Materials, Equipment and Technologies as defined in document S/2006/814 at the link below:
https://undocs.org/S/2006/814
See the list of items, materials, equipment, goods and technologies related to the ballistic missile program as defined in document S/2006/815 at the link: https://undocs.org/S/2006/815
List of materials and technologies related to chemical and biological weapons of mass destruction, as defined in document S/2006/816 at the link: http://undocs.org/S/2006/816

condensates of natural gas to UN member states. This Resolution also prohibits DPRK citizens from working in another country.

In accordance with UNSCR 2397 (2017), adopted in December 2017, the Security Council has tightened measures regarding the supply of any oil products to the DPRK, including the sale or transfer of diesel and oil. The resolution establishes a quota for oil and gas products (500,000 barrels within 12 months from 1 January 2018) and crude oil (4 million barrels or 525,000 tons within 12 months from 22 December 2017) and defines the obligations of countries to carry out such operations.

UNSCR 2397 (2017) also expanded industry sanctions, banning thereby the export of food and agricultural products, machinery, electrical equipment, soil and stone, including magnetite and magnesia, lumber and fishing vessels. The Resolution also prohibits the transfer of fishing rights to the DPRK.

UNSCR 2397 (2017) prohibits the supply of all industrial equipment, automobiles, iron, steel and other metals, with the exception of the delivery, sale or transfer of necessary spare parts of commercial passenger aircraft in operation by the DPRK.

UNSCR 2397 (2017) tightens measures to prevent granting labor rights to DPRK citizens and obliges UN member states to repatriate within 24 months the DPRK state labor protection attaches and citizens who receive income on their territory.

It also tightens measures related to the illegal export of coal and other prohibited goods at sea and the supply of petroleum products to the DPRK via hidden channels and obliges countries to check and arrest any vessels involved in prohibited activities in their ports and territorial waters.

SECTION 4: (Legal frameworks of Georgia pertaining to control over the circulation of strategic goods)

4.1. List of Legal frameworks of Georgia pertaining to control over the circulation of strategic goods:

Control of dual-use items in Georgia is governed by the following normative acts:

- International treaties and agreements;
- Law of Georgia "On the control of military and dual use items"
- Law of Georgia "On licenses and permits";
- Law of Georgia "On license and permit fees";
- Customs Code of Georgia;
- Criminal Code of Georgia;
- General Administrative Code of Georgia;
- Ordinance No 394 of the government of Georgia of 13 June 2014"On the approval of the military and dual-use items control lists";
- Ordinance of Government of Georgia No 372 of 9 June 2014 "On the determination of control measures for military and dual use items";
- Order of the minister of finance of Georgia No 292 of 30 September 2014 "On the adoption of a correlation table of dual use items control list with national commodity nomenclature of foreign economic affairs";
- Order of the minister of finance of Georgia No 291 of 30 September 2014 "On the adoption of rules of issuing permits on export, import and transit of dual-use items, license forms and license application forms";
- Order of the minister of defense of Georgia No 65 of 29 August 2014 "On the approval of the statute of the standing commission of the ministry of defense working on the military and technical issues";
- Order of the Ministry of Finance of Georgia No. 257 of 29 August 2019 “On approval of instructions for the movement and customs clearance of goods in the customs territory of Georgia”.

4.2. Law of Georgia "On the control of military and dual use items"[24]

This Law regulates the principles and rules for the implementation of national control and policy regarding the circulation of military and dual-use items.

The law defines the types of activities that require a dual-use items permit:

- Types of permits;
- Permit issuing authority;
- Conditions for issuing a permit;
- General rules for obtaining a permit;

[24] https://matsne.gov.ge/document/view/2113659?publication=1

- Obligations of the permit seeker;
- The terms of the permit;
- Rights and obligations of licensing authority.

4.3. Law of Georgia "On licenses and permits"[25]

This is a state regulation of activities or actions by means of licenses or permits that shall be carried out only if these activities or actions are directly related to an increased danger for human life or health or to the areas of state or public interest or are associated with the use of public resources. State regulations are carried out only if by issuing a license or permit, it is really possible to reduce this danger or meet the state or public interest. This law also defines an exhaustive list of applicable licenses and permits in Georgia, determines the rules for issuing licenses and permits, amendments to them and their cancellation, persons exempted from the liability of obtaining a permit.

Paragraphs 27, 271, 272, 273 and 274 of Article 24 of the law define the types of permits for import, export, transit, technical assistance and brokering services of dual-use items. Measures related to the issuance of these permits are governed by this law and the law of Georgia "On the control of military and dual use items".

4.4. Law of Georgia "On license and permit fees"[26]

The law of Georgia "On license and permit fees" determines the types and rates, as well as the procedures and deadlines for the payment of the fees established for the right granted by the state to perform activities that require a license or a permit and that are determined by law, and/or for the right of use granted by the state. This Law also determines the types and rates, as well as the procedures and deadlines for payment of the fees for services rendered by state bodies.

According to paragraph 13 (c) of Article 7 of the law, the fee for permit to import or export, re-export and transit dual-use goods is GEL 30.

4.5. Customs Code of Georgia[27]

This code defines the rules and formalities related to the import and export of goods to/from the customs territory of Georgia and customs clearance, the procedure for customs dispute settlement, types of customs violations and liability for these offenses, goals, rights and obligations of the customs authority of Georgia.

Customs control over dual-use goods is carried out in accordance with the provisions of the Customs Code.

[25] https://matsne.gov.ge/ka/document/view/26824?publication=78

[26] https://matsne.gov.ge/ka/document/view/12880?publication=67

[27] https://matsne.gov.ge/ka/document/view/4598501?publication=0

4.6. Criminal Code of Georgia[28]

The Criminal Code of Georgia establishes the grounds for criminal liability, determines what action is criminal, and establishes appropriate punishment or other kinds of criminal prosecution.

The purpose of this code is to prevent crime and observe law. In particular, the code determines the size of coercive measures in relation to illicit trafficking of dual-use goods:

In accordance with Article 214 (4) of the code, the illicit transfer of toxic, poisonous, radioactive materials, explosives and explosive materials, firearms, other materials or equipment that can be used to create weapons of mass destruction and strategically important raw materials, is punishable with imprisonment from five to eight years, and

In accordance with Article 235 of the code, the illegal transfer of weapons of mass destruction and their delivery systems, weapons and armament, technologies of creating military equipment, scientific and technical information or services that are under special export control regimes is punishable by a fine or imprisonment from three to five years.

In accordance with Article 2351 of the code, the illegal production, purchase, storage, disposal, use, processing, examination, transfer, transportation, export, import, trade or other illegal handling of toxic chemicals or their precursors, as defined in the Chemical Weapons Convention, and other related illegal transactions, including violation of Georgia's obligations under international agreements and treaties, shall be punished by imprisonment for a term of five to 10 years. The same actions carried out for manufacturing chemical weapons shall be punished by imprisonment for a term of eight to 14 years[29].

4.7. General Administrative Code of Georgia[30]

The code establishes procedures for issuing and executing administrative-legal acts, considering administrative complaints and applications, and introducing rules for preparing, concluding and executing administrative transactions.

Any person has the right to apply to the Customs Department of the Revenue Service and request information on the goods subject to restrictions/prohibitions on the export, import and transit of these goods.

General rules for filing and administrative proceedings, the timing of decision-making, etc. are defined by Chapter VI of the code.

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[28] https://matsne.gov.ge/ka/document/view/16426?publication=208

[29] *A legal entity shall be punished with a fine, deprivation of the right to act or liquidation and a fine for the acts provided for in this article. Toxic chemicals and precursors, as defined in the Chemical Weapons Convention, are included in the control lists for dual-use and military items are subject to licensing control.*

[30] https://matsne.gov.ge/ka/document/view/16270?publication=30

4.8. Ordinance No 394 of the government of Georgia of 13 June 2014 on "approval of the military and dual-use items control lists".[31]

This ordinance approves:

a) The list of military items (Annex 1), which is similar to the common military control list of the European Union of 11 March 2013, and

b) The list of dual-use items (Annex 2), which fully corresponds to the EU dual-use items control list adopted by Regulation (EC) No 428/2009.

The national dual-use items control list includes control lists developed by international non-proliferation regimes (Wassenaar Arrangement (WA), Missile Technology Control Group (MTCG), Nuclear Suppliers Group (NSG), Australia Group (AG), and the Chemical Weapons Convention CWC).

4.9. Ordinance of the government of Georgia No 372 of 9 June 2014 "On the determination of control measures for military and dual use items"[32]

This ordinance defines:

- The main criteria the standing commission on military-technical issues of the Ministry of Defense of Georgia is to consider when making decisions;
- List of documents submitted for obtaining a permit;
- Grounds for issuing and denying or suspending and cancelling a permit;
- Conditions for exemption from the obligation to obtain a permit;
- Rules and forms for issuing an end-user certificate;
- Issues of inter-agency coordination;
- Methods and rules for monitoring compliance with the terms of the permit by the licensing authority.

4.10. Order of the Minister of Finance of Georgia No 292 of 30 September 2014 "On the adoption of a correlation table of dual use items control list with national commodity nomenclature of foreign economic affairs"[33]

The correlation table is developed on the basis of the Order No 292 of 30 September 2014 of the Minister of Finance of Georgia "On the adoption of a correlation table of dual use items control list with national commodity nomenclature of foreign economic affairs".

The list was developed to simplify the identification of dual-use items during the implementation of export control measures.

In the case of identification by the commodity HS code, the final decision on the identification of items as dual-use items is made taking into account the technical parameters of controlled items indicated in the control list, as well as explanations and notes in it.

[31] https://matsne.gov.ge/document/view/2372203?publication=0

[32] https://matsne.gov.ge/document/view/2368509?publication=0

[33] https://matsne.gov.ge/ka/document/view/2520245?publication=0

4.11. Order of the Minister of Finance of Georgia No 291 of 30 September 2014 "On the adoption of rules for issuing permits on export, import and transit of dual use items, license forms and license application forms"[34]

Order of the minister approves:

a) The application form for obtaining export, import and transit permits involving dual-use items;
b) The application form of permits for brokering services and technical assistance involving dual-use items;
c) The export permit form for dual-use items;
d) The import permit form for dual-use items;
e) The transit permit form for dual-use items;
f) The brokering service permit form for dual-use items;
g) The technical assistance permit form for dual-use items.

4.12. Order of the Minister of defense of Georgia No. 65 of 29 August 2014 "Concerning the approval of the statute of the Standing Commission of the Ministry of Defense working on military and technical issues"[35]

This statute defines the powers of the Standing Commission of the Ministry of Defense working on military-technical issues, the rules for activities and conditions for making decisions by the commission, grounds for cancelling and suspending recommendations, content of applications and documents to be submitted for obtaining a recommendation as well as the activities of a group of experts from relevant bodies/institutions represented in the commission.

4.13. Order of the Minister of Finance of Georgia No. 257 of 29 August 2019 "On approval of instructions for the movement and customs clearance of goods in the customs territory of Georgia"[36]

This order determines the customs control measures by the customs authorities, rules and mechanisms for the implementation of customs control and customs formalities, objectives and types of control, basics of post-clearance control, principles of using an automated risk management system, bans and restrictions on goods subject to customs clearance and control as well as license control rules.

[34] https://matsne.gov.ge/ka/document/view/2520515?publication=0
[35] https://matsne.gov.ge/ka/document/view/2477984?publication=0
[36] https://matsne.gov.ge/ka/document/view/4644552?publication=0

SECTION 5: Definition of Dual-Use Item

5.1. Definition of dual-use item
5.2. Structure of the list of dual-use items and how to use it
5.3. Products covered under the control list
5.4. Products covered under the control list (examples)
5.5. Search methods and commodity identification; practical cases; explanations; recommendations; ways of using the correlation table
5.6. Goods subject to import and transit permits (examples) and goods marked with * and **.

This chapter reviews the structure of the control list of dual-use items, rules for using this list and the correlation table, "CATCH ALL" clause, practical examples of identification according to the technical parameters of the product that makes it easier for readers to use the control list and to classify goods.

5.1. Definition of dual-use item

According to UNSCR 1540 of 28 April 2004, "Materials related to nuclear, chemical and biological weapons and their means of delivery include: Materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included in national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and means of their delivery.

Note: means of delivery are specially designed missiles and other unmanned systems that can carry nuclear, chemical and biological weapons.

According to council regulation (EC) No 428/2009 of 5 May 2009, setting up a community regime for the control of exports, transfer, brokering and transit of dual-use items, "dual-use items shall mean items, including software and technology, which can be used for both civil and military purposes, and shall include all goods which can be used for both non-explosive uses and can assist in any way in manufacturing nuclear weapons or other nuclear explosive devices".

According to the definition specified in the law of Georgia "On the control of military and dual use items", "dual use items - any item (including software or/and technology), which can be used for both civil and military purposes, and in any way for biological and chemical weapons as well as for non-explosive uses and the manufacture of nuclear weapons or other explosive devices".

The term "dual-use items" is often replaced with the terms "strategic-purpose goods", "products subject to export control" and "control lists".

5.2. Structure of the list and how to use it

The list of military products and dual-use goods, whose export, import, transit, related brokerage services and technical assistance are subject to permit control (control lists) is approved by Annexes 1 and 2 of Decree No 394 of 13 June 2014 of the government of Georgia.

The list of dual-use goods of Georgia is compatible with the Council Regulation (EC) No 428/2009 of 5 May 2009, setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

In order to find products on the list, the knowledge of thematic and structural composition of the list is very important. The control list covers **the list of dual-use goods** and **general notes,** which refer to all categories of products of the list.

General Notes give the following information:

- If a product is designed or modified for military use, reference should be made to the military list;
- If an item on the list is the principal element of any device, and this item can be removed and used for dual purposes, then the control of this item is carried out in accordance with the provisions of the list;
- Goods specified in the control list include both new and used goods;
- In some instances, chemicals are listed by name and CAS number (chemical substance identification number). CAS numbers are shown to assist in identifying a particular chemical or mixture, irrespective of nomenclature. Nevertheless, CAS numbers cannot be used as unique identifiers because some forms of the listed chemicals have different CAS numbers, and mixtures containing a listed chemical may have different CAS numbers.

The control list covers the following:

- **Nuclear Technology Note (NTN)**, which establishes general rules for the control of nuclear technologies alone;
- **General Technology Notes (GTN) and General Software Notes (GSN)** establish general rules for the control of technologies and software of all categories except for nuclear ones;
- **Acronyms and abbreviations,** which explain acronyms and abbreviations used in the list. For example, AVLIS means Atomic Vapor Laser Isotope Separation, AISI means American Iron and Steel Institute, etc.;

Definitions of the terminology in the list, which explains definitions of terminology found in the list with **double quotation marks**. For example, according to the definition given in section Definition of Terms, **"Aircraft"** (1, 6, 7, 9) means a fixed wing, swivel wing, rotary wing (helicopter), tilt rotor or tilt-wing airborne vehicle. In the control list the term "Aircraft" is everywhere found with "double quotation marks" within the meaning of the section Definition of Terms. The numbers inserted in the brackets after the defined term (1, 6, 7, 9) mean that the reference is made to the relevant categories (in this case, reference is made to the categories 1, 6, 7 and 9). It is noteworthy, that the definitions of the terms placed in **single quotation marks** in the list are given in **Technical Notes** to the corresponding ECCN numbers (Export Control Classification Number - ECCNs are five-character alpha-numeric designations used to identify dual-use items for export control purposes);

- **Technical Notes,** which are of great importance in the process of working with the list, since technical notes determine the conditions and characteristics necessary for goods to be included in the control list and specify which goods are controlled and what technologies are used to describe the terms;

- **Note**, which as a rule, specifies a specific ECCN number or sub-control area, and in most cases, exclude products from the list;
- **N.B. (Nota bene)** - indicates that the definition in it is of particular importance and indicates one or more of the recordings in which the specific products should be controlled. Following a specific point, **N.B.** often indicates ECCN number that contains similar item contained in the specified ECCN and/or provides brief explanations about the product or terms.

Example of how to read Technical Note, Note and N.B. in the list:

1A006 Equipment, specially designed or modified for the disposal of improvised explosive devices and components and accessories specially designed for the purpose:

N.B. SEE ALSO MILITARY GOODS CONTROLS.

a. Remotely operated vehicles;
b. 'Disruptors'.

Technical Note:
'Disruptors' are devices specially designed for the purpose of preventing the operation of an explosive device by projecting a liquid, solid or frangible projectile.
Note: 1A006 does not control equipment when accompanying its operator.

In this example:

- **N.B.** gives reference to the military list, which means that this equipment can also be controlled by a list of military goods;
- **Technical Note** explains a definition of 'disruptors';
- **Note** defines the condition in which case the listed device in 1A006 is not controlled.

Some ECCN numbers (e.g. 0C001*, 0B004*, 0B002*, 0B001*, etc.) are marked with asterisks (*), which means that the import, export, transit, related brokerage services and technical assistance of the products classified in this ECCN are subject to permit control, while the permit shall be issued on the basis of a recommendation of the Standing Commission of Military-Technical Issues of the Ministry of Defense of Georgia.

A similar rule of control applies to the circulation of products marked with so-called two asterisks (**), but ECCN numbers are not marked with two asterisks on the list.

Any of the listed items are considered to be marked with two asterisks if the export, import, transit, related brokerage service and technical assistance are provided to/from the country under the United Nations Security Council Resolution sanctions/ embargoes. The principle of two asterisks is the principle of control of the products on the list according to the destination or sending country.

It is possible to export the goods under export permit that are not included in the list, but its technical and functional characteristics indicate that these subjects can contribute significantly to the design, development or production of weapons of mass destruction and the means of their delivery or

military products. The form of control of such products is known as the Catch-All Clause and is focused on not only the lists, but also on the end-user and the end-use of products.

Some of the items that have the same functional use and technical name found in several entries in the control list (references are made by N.B.s), which is explained by the fact that the control of each specific item is carried out by different non-proliferation and security regimes. Accordingly, the scope of use and technical parameters of these items are different.

Example:

"Isostatic presses" are devices that are widely used in mechanical engineering and nuclear and aerodynamic industry to produce high resistance and density details from metal, ceramic and graphite (carbon) powder materials. Isostatic presses are classified in three different ECCN numbers: 2B004, 2B104, and 2B204.

As we can see, the third numbers of ECCN differ (0, 1, 2), which means that isostatic presses are controlled by the Wassenaar Arrangement (WA), the Missile Technologies Control Regime (MTCR) and the Nuclear Supply Group (NSG) and their inclusion in the lists is due to the fact that isostatic presses can be used for the production of components necessary for military, missile and nuclear products. According to the specific fields of application, the technical parameters (chamber cavity inside diameter, controlled thermal environment and working pressure) for isostatic presses included in different ECCNs may vary.

The types of products on the list subject to control are classified under ECCN numbers. The knowledge of their structure will be very helpful in the process of identification and classification of goods.

The list of dual-use items consists of 10 categories of products. Products are categorized in terms of use and technical and functional purposes. Digits from 0 to 9 are indicative of each category:

Category 0 Nuclear materials, facilities and equipment;
Category 1 Special materials and related equipment;
Category 2 Processing of materials;
Category 3 Electronics;

Category 4 Computers;
Category 5 Telecommunications and "information security";
Category 6 Sensors and lasers;
Category 7 Navigation and avionics;
Category 8 Marine;
Category 9 Aerospace and propulsion.

The first numeric symbol of ECCN in the control list points to the category (e.g.: 1C111).

Each category includes groups formed according to technical application identified by alphabet letters A, B, C, D, E:
A. Systems, equipment, components;
B. Testing, inspection and production equipment;
C. Materials;
D. Software;
E. Technologies.

In the control list, the second alphabetic symbol of ECCN indicates the group (e.g.: 1C111).

A common control list of dual-use items includes products, technologies and software listed in nonproliferation and security regimes, which are: Nuclear Suppliers Group (NSG), Missile Technology Control Regime (MTCR), Australia Group (AG), Wassenaar Arrangement (WA) and The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (the Chemical Weapons Convention or CWC)

In the control list, the third numeric symbol of ECCN points to the relevant nonproliferation and security regime in the following order:

0 - Wassenaar Arrangement (WA);
1 - Missile Technology Control Regime (MTCR);
2 - Nuglear Suppliers Group (NSG);
3 - Australia Group (AG);
4 - Chemical Weapons Convention (CWC).

If the third numeric symbol of ECCN is "0", it means that items under this ECCN are listed in WA dual-use items control list (e.g.: 1A001-1A008, 1B001-1B003, 1C001-1C012 etc.).

If the third numeric symbol of ECCN is "1", it means that items under this ECCN are listed in MTCR second-category control list, implying that they can be used not only in missile technologies (e.g.: 1A102, 1B102, 1B115-1B119, 1C101-1C111, 1C116-1C118 etc).

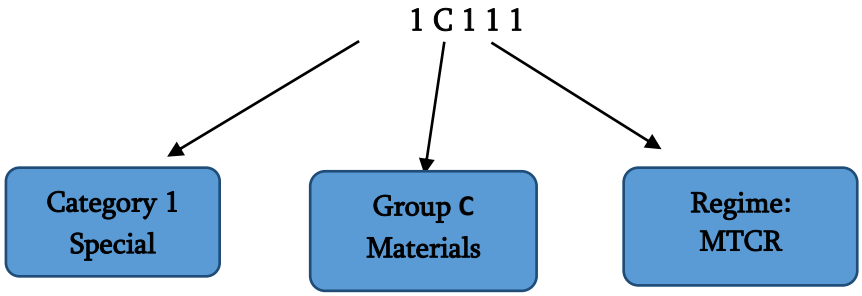
If the third numeric symbol of ECCN is "2", it means that items under this ECCN are listed in Annex 2 of NSG guidelines (INFCIRC/254, Part 2), and are dual-use goods and technologies related to the

nuclear field that can be used for civil purposes, as well as nuclear fuel cycles and other nuclear processes (1A202-1A227, 1B201-1B233, 1C202-1C240).
If the third numeric symbol of ECCN is "3" or "4", it means that items under this ECCN are listed according to AG or CWC and are related to manufacturing chemical or biological weapons (e.g.: 1C350, 1C351-1C354, 1C450 etc.).

Example:

Under ECCN **1C111,** propellants and constituent chemicals for propellants are controlled. Let's try to read this ECCN symbol by symbol:

- The first numeric symbol "1" implies that this item is included in the first category and is a special material;
- The second alphabetic symbol "C" implies that this item is included in the group of materials;
- The third numeric symbol "1" implies that the item control is carried out in accordance with the MTCR, and these items can be used for the creation of missiles;
- The fourth and the fifth symbols "11" point to relevant numerations in the list.



5.3. Products covered under the control list

5.3.1. Category 0 (Nuclear materials, facilities and equipment) includes equipment, materials and components specially designed and manufactured for nuclear purposes and are directly involved in the processes of enrichment and creation of nuclear materials[37]:

- "Nuclear reactors" and equipment and components specially designed or prepared for the purpose (0A001*);
- Plants for the separation of isotopes of "natural uranium", "depleted uranium" or "special fissile materials", and equipment and components specially designed or prepared for the purpose; specially designed or prepared auxiliary systems, equipment and components 0B001*; 0B002*)[38]

[37] *Note: these items are listed in Annexes A and B to NSG guidelines (INFCIRC/254, Part 1*).
[38] *Note: Isotope separation plants include equipment and components used for the following enrichment processes: gas centrifuge separation; gaseous diffusion separation; aerodynamic separation; chemical exchange separation; ion-exchange separation; atomic vapor "laser" isotope separation (AVLIS); molecular "laser" isotope separation (MLIS); plasma separation; electromagnetic separation;*

- Plants for the conversion of uranium and equipment specially designed or prepared for the purpose (0B003)[39];
- Plants for the production or concentration of heavy water, deuterium and deuterium compounds and equipment and components specially designed or prepared for the purpose (0B004*);
- Plants specially designed for the production of nuclear reactor fuel elements and equipment specially designed or prepared for the purpose (0B005);
- Plants for the reprocessing of irradiated nuclear reactor fuel elements, and equipment and components specially designed or prepared for the purpose (0B006);
- Plants for the conversion of plutonium and equipment specially designed or prepared for the purpose (0B007);
- Natural uranium or depleted uranium or thorium in the form of metal, alloys, chemical compounds or concentrates; Special fissile materials (plutonium-239, uranium-233, uranium enriched in the isotopes 235 or 233); deuterium, heavy water (deuterium oxide) and other compounds of deuterium, and mixtures and solutions containing deuterium; graphite to be used in a nuclear reactor (0C001*-0C005);
- Software and Technologies specially designed or modified for the development, production or use of goods specified in Category 0 (0D001-0E001).

5.3.2. Category 1 (Special materials and related equipment)

- Components for missiles (valves, gaskets, diaphragms etc.); composite structures or laminates; equipment and components for the protection against and detection of biological, chemical and nuclear agents and explosives; protective suits, body armor and components; Explosive devices, electrically driven explosive detonators, charges and detonating cords (1A001-1A008);
- Re-saturated pyrolyzed carbon-carbon components designed for space launched vehicles or sounding rockets; composite structures; platinized catalysts; specialized packing which may be used in separating heavy water from ordinary water; high-density (lead glass or other) radiation shielding windows (1A102, 1A202, 1A225, 1A226*, 1A227);
- Equipment for the production or inspection of composite structures or laminates; equipment for producing metal alloys, metal alloy powder or alloyed materials, propellant and propellant constituents; electromagnetic isotope separators; tritium and fluorine facilities; pumps; lithium isotope separation facilities (1B001, 1B002, 1B003, 1B101, 1B102, 1B115-1B119, 1B201-1B233);
- Polymeric materials; metal alloys and alloyed materials; fluids and lubricating materials; fibrous or filamentary materials; components and chemicals; materials and alloys for propellants that may contribute to the creation of nuclear enrichment equipment and

[39] *Note: This includes: a. Systems for the conversion of uranium ore concentrates to UO_3; b. Systems for the conversion of UO_3 to UF_6; c. Systems for the conversion of UO_3 to UO_2; d. Systems for the conversion of UO_2 to UF_4; e. Systems for the conversion of UF_4 to UF_6; f. Systems for the conversion of UF_4 to uranium metal; g. Systems for the conversion of UF_6 to UO_2; h. Systems for the conversion of UF_6 to UF_4; i. Systems for the conversion of UO_2 to UCl_4.*

components; boron enriched in the boron-10 (10B) isotope; tungsten; calcium; magnesium; bismuth; hafnium metal; helium-3; lithium enriched in the lithium-6 (6Li) isotope; zirconium; tritium; Radionuclides appropriate for making neutron sources based on alpha-n reaction; chemicals, which may be used as precursors for toxic chemical agents; human, animal and plant pathogens and toxins; toxic chemicals and precursors (1C001-1C012, 1C101-1C118, 1C202-1C240, 1C350-1C354,1C450);

- Software and Technologies specially designed or modified for the development, production or use of goods specified in Category 1 (1D001-1D003, 1D101, 1D103, 1D201, 1E001, 1E002, 1E104, 1E201-1E203).

5.3.3. Category 2 (Materials processing)

- Hyper-tolerant bearing systems; crucibles made of materials resistant to liquid actinide metals; valves made of corrosion resistant materials (2A001, 2A101, 2A225, 2A226);
- Machine tools, isostatic presses, surface deposition equipment; dimensional inspection and measuring systems; balancing and test machines and related equipment; centrifuges, robots, remote manipulators; vacuum or other controlled atmosphere metallurgical melting and casting furnaces and related equipment; rotor fabrication or assembly equipment; induction furnaces; pressure transducers; vacuum pumps; chemical manufacturing facilities; equipment capable of being used in handling biological materials (2B001-2B009, 2B104-2B122, 2B201-2B233, 2B350-2B352) etc.;
- Software and technologies specially designed or modified for the development, production or use of goods specified in Category 2 (2D001-2D351, 2E001-2E301).

The equipment involved in Category 2 can be used for the development, production and testing of weapons and military equipment (2B001-2B009), means of delivery (2B104-2B122), equipment involved in nuclear processes and their components (2B201-2B232), means used for mixing chemical substances, cultivation of viruses and production of toxins (2B350-2B352) etc.

5.3.4. Category 3 (Electronics) - electrical equipment and components, equipment and materials for their production, which can be used both for industrial purposes, as well as in the areas of explosives, spacecraft, missiles and nuclear materials:

- Integrated circuits; vacuum electronic devices and cathodes; transistors; microwave power amplifiers; acoustic-wave devices; high energy storage capacitors; superconductive electromagnets and solenoids; solar cells, cell-interconnect-cover glass (CIC) assemblies, solar panels, and solar arrays; thyristor devices and thyristor modules; signal analyzers and signal generators; recording equipment and network analyzers; analogue-to-digital converters; thermal batteries; condensers; flash X-ray generators or pulsed electron accelerators; frequency changers or generators; high-power direct current power supplies; high-voltage direct current power supplies; switching devices; high-current and high-speed pulse generators; neutron generator systems; multipoint initiation systems (3A001-3A003, 3A101-3A102, 3A201-3A233);
- Equipment, materials and compounds for manufacturing and testing semiconductor devices (3B001-3B002, 3C001-3C006);

- Software and technologies specially designed or modified for the development, production or use of goods specified in Category 3 (3D001-3D225, 3E001-3E225).

5.3.5. Category 4 (Computers)

- Electronic computers and related equipment rated for operation at an ambient temperature below 228 K (- 45 °C) or above 358 K (85 °C); radiation hardened computers; digital computers for difficult computational tasks having an adjusted peak performance (APP) exceeding 16 weighted teraflops (WT), which can be used for modelling nuclear weapons; systolic array computers, neural computers, optical computers; analogue computers, digital computers or digital differential analyzers, which are ruggedized and designed or modified for use in space launch vehicles; hybrid computers specially designed for modelling, simulating or designing integration of space launch vehicles (4A001, 4A003, 4A004, 4A101, 4D001, 4E001).
- Software and technologies specially designed or modified for the development, production or use of goods specified in Category 4 (4D001-4D004, 4E001).

5.3.6. Category 5: Telecommunications and Information Security

Part 1 (Telecommunication) includes:

- Telecommunication systems, equipment, components and accessories, specially designed to withstand transitory electronic effects or electromagnetic pulse effects, both arising from a nuclear explosion and specially hardened to withstand gamma, neutron or ion radiation; telecommunication systems, equipment, components and accessories, specially designed to operate outside the temperature range from 218 K (– 55 °C) to 397 K (124 °C); underwater untethered communication systems; Radio equipment operating in the 1,5 MHz to 87,5 MHz band; radio equipment employing spread spectrum techniques, including frequency hopping techniques; radio equipment employing ultra-wideband modulation techniques, having user programmable channelizing codes, scrambling codes or network identification codes; optical fiber cables; electronically steerable phased array antennae; radio direction finding equipment; mobile telecommunication interception or jamming equipment, and monitoring equipment; passive coherent location (PCL) systems or equipment; counter improvised explosive device (IED) equipment and related equipment; telemetry and telecommunication control equipment, including ground equipment, designed or modified for missiles; telecommunication test, inspection and production equipment, components and accessories (5A001, 5A101, 5B001).
- Software and technologies specially designed or modified for the development, production or use of goods specified in Part 1 of Category 5 (5D001-5D101, 5E001-5E101).

Part 2 (Information Security) includes:

- Information security systems, equipment and components, electronic modules, integrated circuits, which use symmetric and asymmetric algorithms for the cryptography for data confidentiality; communication cable systems designed or modified with the use of mechanical, electrical or electronic means to detect surreptitious intrusion; systems,

equipment and components for defeating, weakening or bypassing information security; information security test, inspection and production equipment (5A002-5A004, 5B002);

- Software and technologies specially designed or modified for the development, production or use of goods specified in Part 2 of Category 5 (5D002, 5E002).

5.3.7. Category 6 (Sensors and lasers)

- Marine acoustic systems, equipment and components specially designed for the purpose. In particular: Survey equipment designed for seabed topographic mapping; systems or transmitting and receiving arrays, designed for object detection or location; acoustic projectors, including transducers, incorporating piezoelectric, magneto-astrictive, electro-astrictive, electrodynamics or hydraulic elements operating individually or in a designed combination; acoustic systems and equipment, designed to determine the position of surface vessels or underwater vehicles; sonar systems, specially designed or modified to detect, locate and automatically classify swimmers or divers; hydrophones; space-qualified optical detectors; image intensifier tubes; photocathodes; electron image amplification; focal plane arrays; mono-spectral imaging sensors and Multispectral imaging sensors; optical sensing fibers; high-speed cinema recording cameras; imaging cameras; optical mirrors (reflectors); optical components; lasers; laser acoustic detection equipment; magnetometers, magnetic gradiometers; gravity meters (gravimeters) and gravity gradiometers; radar systems; radiation hardened detectors; photomultiplier tubes; solid state and electron tube cameras for nuclear exposures; lasers used in enrichment process; velocity interferometers; pressure sensors (6A001, 6A002, 6A003, 6A004, 6A005, 6A006, 6A008, 6A102, 6A107, 6A108, 6A202, 6A203, 6A205, 6A225, 6A226);
- Equipment to produce, align and calibrate land-based gravity meters; pulse radar cross-section measurement systems (6B004, 6B007, 6B008*, 6B108*);
- Optical sensor materials; synthetically produced diamond materials; (6C002, 6C004, 6C005);
- Software and technologies specially designed or modified for the development, production or use of goods specified in Category 6 (6D001-6D003, 6D102, 6D103, 6E001-6E003, 6E101, 6E201).

5.3.8. Category 7 (Navigation and avionics) - devices that are necessary for aviation and submarine navigation:

- Missile and aviation accelerometers; gyros; inertial measurement systems; star trackers; global navigation satellite systems (GNSS) receiving equipment; airborne altimeters and altimeters of radar or laser radar type; underwater sonar navigation systems; receiving equipment for global navigation satellite systems (GNSS; e.g. GPS, GLONASS, or Galileo); passive sensors for use in space launch vehicles or sounding rockets; flight control systems and servo valves, for use in space launch vehicles, sounding rockets or missiles (7A001, 7A002, 7A003, 7A004, 7A005, 7A006, 7A008, 7A101, 7A102, 7A103, 7A104, 7A105, 7A106*, 7A115, 7A116, 7A117);
- Test, calibration or alignment equipment, specially designed for the aforementioned products listed in 7A, establishment of their characteristics and production (7B001, 7B002, 7B003, 7B102, 7B103);

- Software and technologies specially designed or modified for the development, production or use, operation or maintenance, improvement, modelling or simulation of goods specified in Category 7 (7D001, 7D002, 7D003, 7D101-7D103, 7E001-7E004, 7E101-7E104).

5.3.9. Category 8 Marine

- Submersible vehicles (manned or unmanned) and surface vessels; systems, equipment and components, specially designed or modified for submersible vehicles; underwater vision systems; light systems; robots; remotely controlled articulated manipulators specially designed or modified for use with submersible vehicles; independent air power systems; water-screw propellers, power transmission systems, power generation systems and noise reduction systems; hydraulic reactive engines; underwater swimming and diving equipment; diver deterrent acoustic systems, water tunnels for measuring acoustic fields generated by a hydro-flow around propulsion system models; syntactic foam designed for underwater use (8A001, 8A002, 8B001, 8C001);
- Software and technologies specially designed or modified for the development, production or use, operation or maintenance, improvement, modelling or simulation of goods specified in Category 8 (8D001, 8D002, 8E001, 8E002).

5.3.10. Category 9 Aerospace and propulsion

- Aero and Marine gas turbine engines and assemblies and components specially designed for them; space launch vehicles, spacecraft, spacecraft buses, spacecraft payloads, spacecraft on-board systems or equipment, and terrestrial equipment; liquid rocket propulsion systems and components; solid rocket propulsion systems and components; hybrid rocket propulsion systems and components; ramjet, scramjet or combined cycle engines; unmanned aerial vehicles (UAVs), unmanned airships, related, equipment and components; turbojet and turbofan engines; sounding rockets; composite structures, laminates and products, specially designed to be used in missiles or subsystems; pulse jet engines; launch support equipment and reentry vehicles; liquid or gel propellant tanks (9A001, 9A002, 9A003, 9A004, 9A005, 9A006, 9A007, 9A008, 9A009, 9A010, 9A011, 9A012);
- Spraying or fogging systems, specially designed or modified for fitting aircraft, lighter-than-air vehicles or unmanned aerial vehicles capable of delivering biological agents in the form of infectious aerosols (9A350);
- Equipment specially designed for inspecting and producing gas turbine brush seals, gas turbine blades, vanes or tip shrouds; on-line (real time) control systems, instrumentation (including sensors) or automated data acquisition and processing equipment; equipment specially designed for inspecting the integrity of rocket motors; aerodynamic test facilities; environmental chambers and anechoic chambers capable of simulating any flight conditions; specially designed production equipment and facilities; test benches and stands for solid or liquid propellant rockets or rocket motors (9A101-9A120, 9B001-9B009, 9B105-9B117);
- Insulation materials in bulk form and interior lining for rocket motor cases usable in missiles or specially designed for solid propellant rocket engines; resin impregnated fiber glass

and metal coated fiber preforms for them, composite structures, laminates and manufactures (9C108, 9C110);

- Software and technologies specially designed or modified for the development, production or use, operation or maintenance, improvement, modelling or simulation of goods specified in Category 9 (9D001-9D105 9E001-9E102).

5.4. Products covered under the control list (Practical cases)

In this section, we will try to explain the significance of the structure of the list and the export control of the products thereon. By means of some prominent and practical examples, we will consider the parameters used to qualify goods produced for civilian and industrial purposes as dual-use items and so forth.

Major civil areas where dual-use products and technologies can be used are mining-extracurricular activities (using strong explosives, explosive devices, etc.), oil and gas extraction (tanks, valves, centrifuges, pipes made of corrosion resistant alloys against chemical substances,), telecommunication and communication (network and cryptographic devices, data protection systems, etc.), heavy and light industries (digital handling machine tools, polymeric materials, x-ray and ultrasound test equipment, chemicals, etc.), maintenance and supervision of the construction, commercial and office facilities systems (thermal and night vision surveillance cameras, unmanned aerial vehicles, etc.) and many other areas.

5.4.1. Unmanned aerial vehicles – UAVs (HS Heading 8802)

In recent years, there are sets of frequently asked questions (FAQ) about export/import of unmanned aerial vehicles (so-called drones). The questions are asked on whether they need a permit or not, what type of unmanned aerial vehicles are under control, etc.

UAVs are widely used for strategic, as well as civilian purposes: in military/intelligence operations, for the delivery of missiles, explosive devices and chemical and biological agents, for the supervision and safety of industrial and commercial facilities, in cartography and film industry, tourism and entertainment industry, for agricultural purposes, and in smuggling and other illegal activities. Along with the development of technologies, UAVs have acquired useful as well as harmful functions for a large number of societies. Therefore, the control of the products is extensive control worldwide.

According to the definition in the dual-use items control list, unmanned aerial vehicle (UAV) (9) means any aircraft capable of initiating flights and making controlled flight and navigation without any human presence on board.

In the control list (categories 1, 3, 6, 7 and 9) UAVs have the following meanings:

- Complete rocket systems and unmanned aerial vehicle systems, capable of delivering at least 500 kg of payload to a range of at least 300 km (ballistic missiles, space launch vehicles, spacecraft and research rockets), complete atmosphere UAVs (including wing missiles, radio operated targets and intelligence drones), capable of delivering at least 500 kg of payload to a range of at least 300 km. These are flying machines flying at high altitudes (up to 20,000 m), can fly for 24-48 hours, while the gross takeoff weight is 2,500-12,500 kg (HALE, MALE);

- Complete rocket systems and complete atmosphere UAVs, which are not required to carry 500 kg of payload, but can fly at a distance of 300 km. These are UAVs with a long duration of flight and with the gross takeoff weight from 50 kg up to 1,500 kg (9A112.a);
- UAVs having autonomous flight control and navigation capabilities due to direct natural vision of the operator, incorporating an aerosol dispensing systems/mechanisms with a capacity greater than 20 liters or designed or modified to incorporate an aerosol dispensing systems/mechanisms with a capacity greater than 20 liters. Such UAVs can be operated by the navigation system on-board and can be moved from a programmable route or satellite or from the operational area by the operator. Chemical agents are represented in the form of aerosol, powder or liquid substances, e.g. such as pesticides for fogging fields, dry chemicals for the formation of aerosol clouds or for the artificial separation of rainfall from clouds. UAVs equipped with aerosol dispersion devices often have the form of a helicopter and are used for pesticides and fertilizers in agriculture. As a rule, these devices are characterized by lower resistance, limited flight distances and durations, but similar models can also be encountered in controlled aircraft. These kinds of UAVs are classified under ECCN 9A112.b within the control list and are subject to export control[40].
- small-size UAVs, with a maximum endurance higher than or equal to 30 minutes, but lower than 1 hour and designed to take-off and have stable controlled flights in wind gusts equal to or exceeding 46,3 km/h (25 knots); or with a maximum endurance of 1 hour or higher[41];

[40] *These UAVs are controlled by the Missile Technologies Control Regime (MTCR), whose purpose was the control of the proliferation of nuclear weapons delivery systems at the time of its formation (1987), in particular, systems capable of delivering at least 500 kg of payload to a range of at least 300 km. Since 1992, MTCR has expanded its control and covered UAVs for all types of mass destruction.*

[41] *These parameters under which such devices were subject to control were included in the control list (WA-LIST (14) 2, 25-03-2015) in 2015, as it is considered that small-size UAVs can cause strategic threats and can also be used to deliver*

9A012
Civil application:
Commercials and TV shows, film industry, tourism, etc
Strategic application:
Intelligence operations

9A112
Civil application:
Fogging agricultural fields
Strategic application:
Chemical and biological agents dissipation

5.4.2. Machine tools for turning, machine tools for milling, machine tools for grinding, cutting (removing) machines, weaving machines, deep-hole-drilling machines (ECCNs 1B001, 2B001-2B003, 2B201, 2B204): HS Headings 8446-8460

Machine tools for removing metals, ceramics or composites are used for making machine tools, jewelry, wood and other household and civilian products. In addition, these machine tools make available critical details for the equipment used to manufacture nuclear weapons and uranium enrichment plants (for example, cylinders for centrifuges, nuclear reactor components, bearings, etc.), powder materials and explosive devices for making rocket fuel, metals and composite powder and other materials, which results in their strategic significance. Simply put, machine tools intended for making especially sensitive products and components included in the control list are also subject to control.

The classification of machine tools according to the dual use items control list is carried out on the basis of their accuracy (positioning accuracy and the size and surface of the axle), the number of axles and numerical control.

For example, the following machine tools are considered as dual use items and their export is controlled:

- Machine tools for turning and cutting that can be equipped with electronic devices for numerical control, having two or more axes, which can be coordinated simultaneously for contouring control, and having unidirectional positioning repeatability equal to or less (better) than 0,9 μm (2B001.a; 2B001.b);

military cargoes to the place of destination. These kinds of UAVs are classified under ECCN 9A012 within the control list and are subject to export control.

1

2

1. 2B001.a–MT for turning
2. 2B001.c –MT for grinding

Civil application:
Mechanical engineering and light industry

Strategic application:
Nuclear enrichment process and ballistic missiles

- Machine tools for milling that can be equipped with electronic devices for numerical control, having three or more axes which can be coordinated simultaneously along one or more linear axes for contouring control, and having unidirectional positioning repeatability equal to or lower (better) than 1,1 μm (2B001.c);
- Machine tools for removing metals, ceramics or composites by means of water or other liquid jets, including those employing abrasive additives, electron beam or laser beam, and having at least two rotary axes that can be coordinated simultaneously for contouring control with a positioning accuracy lower (better) than 0,003° etc.

5.4.3. Fibrous and filamentary materials
(ECCNs 1C010, 1C210): HS Headings 5402, 5407, 5503, 6815

According to the definition in the dual-use items control list, fibrous or filamentary materials include continuous monofilaments, continuous yarns and roving, tapes, fabrics, random mats and braids, chopped fibers, staple fibers and coherent fiber blankets and whiskers of any length, either monocrystalline or polycrystalline,.

The dual-use items control list includes organic (aromatic polyamides), inorganic (e.g. glass, quartz, boron, basalt and so forth), ceramic (e.g. aluminum oxide) and carbonated fibers and filaments that are used for modern composite structures (for filling) in order to improve their physical and mechanical properties.

- One of the examples of synthetic organic fibers is the aramid fiber that has found considerable use in military and aerospace industry. The world's most famous aramid fibers are manufactured as Kevlar® (so-called Para-Arid) and Nomex® (the so-called Meta-Arid) trade marks (manufactured by Du Pont). Aramid tissue is no less strong than steel, and it is about five times lighter. Aramid fibers can withstand high-speed shells and have vibration breakdown properties, so they are used for ballistic protection of military aircraft, also for manufacturing protective reinforced motors, thermal impact protective clothing and armored helmets.

The classification of organic fibrous or filamentary materials on the basis of the dual use items control list is carried out if they have the following technical properties (1C010.a):

1. "Specific modulus" exceeding 12.7×10^6 m; and
2. "Specific tensile strength" exceeding 23.5×10^4 m[42].

- Carbon fibers, known as graphite fibers, are very thin (5-15 microns) in the form of threads composed of microscopic crystals combined with carbon atoms. Carbon fibers are characterized by high tensile strength and low weight. They are resistant to chemical substances and high temperatures and low heat expansion. Because of these qualities, carbon fiber products have been widely used in space industry, wind energy, housing, construction, automotive industry, sports (golf clubs and tennis rockets, skis, bikes), culture (musical instruments - guitar, piano) and entertainment (toys like remote control machines). Some carbon fibers (e.g. HexTow® (Hexcel), SIGAFIL® (SGL Group), TORAYCA® (Toray), PANEX® and PRYON® (Zoltek), also Pyrofil® (Mitsubishi/Grafil)) are used for making strategic products such as nuclear reactor components, uranium enrichment centrifuge rotors, missile batteries, etc. There is information about the existence and use of so-called graphite bombs. This is a bomb containing carbon fibers, which explodes sending carbon fibers the electrical lines and electric power stations, causing short circuits and paralyzing the power system.

The classification of organic fibrous or filamentary materials on the basis of the dual use items control list is carried out if they have the following technical properties (1C010.b):

1. "Specific modulus" exceeding 14.65×10^6 m; and
2. "Specific tensile strength" exceeding 23.5×10^4 m.

Carbon Fiber: ECCN1C010.b

Civil application:
Sports equipment, musical instruments, toys,
light and heavy industries
Strategic application:
Nuclear reactor components, millise components, military production, spacecraft

It should also be noted that equipment for manufacturing fibers or filaments and components (1B001, 1B101), composite structures or laminates (1A002), armaments (1A005) and various components (1A202) manufactured from these materials are also subject to export control.

[42] *According to the definition in the dual-use items control list, "Specific modulus" is Young's modulus in Pascal, equivalent to N/m² divided by specific weight in N/m³, measured at a temperature of (296 ± 2) K ((23 ± 2°C) and a relative humidity of (50 ± 5)%, and "Specific tensile strength" is ultimate tensile strength in Pascal, equivalent to N/m² divided by specific weight in N/m³, measured at a temperature of (296 ± 2) K ((23 ± 2)°C) and a relative humidity of (50 ± 5)%.*

5.4.4. Aluminum powder

(ECCN 1C111): HS Heading 7603
CAS 7429-90-5
UN 1396

Civil application: pigments, pyrotechnics, packing materials, materials for metal coating.
Strategic application: propellants, explosives.

Aluminum powder is widely used in areas such as powder metallurgy, pigmentation (pigments), packaging materials, machine building (as metal coating), solar elements, criminology, metal coatings, etc.

Spherical aluminum powder is an easily flammable substance and is widely used in manufacturing pyrotechnics and industrial (e.g. ammonal) explosives.

Small size particles and high purity aluminum powder are also used as catalysts in military pyrotechnic mixtures. For example, explosive substance tritonal contains 80% of trinitrotoluene and 20% of aluminumpowder. Aluminum powder improves trinitrotoluene's high explosive properties and provides maximum pressure for the explosion. Various types of ammunition, including air bombs, contain tritonal.

Correspondingly, a list of military products (ML 8) controls spherical or spheroid aluminum powder (CAS 7429-90-5) with the particle size of 60 μm or less manufactured from materials with an aluminum content of 99 % or more.

The dual-use items control list includes spherical or spheroid aluminum powder other than that specified in the Military Goods Controls with the particle size of less than 200 μm and an aluminum content of 97 % by weight or more, if at least 10 % of the total weight is made up of particles of less than 63 μ.

It is noteworthy that dual-use items control list also includes metal powder production equipment and equipment for the production of propellants and propellant constituents, as well as mills usable for grinding or milling metal substances (1B102, 1B115, 1B119).

5.4.5. Valves

(ECCNs 0B001.b.14.b; 0B001.c.6; 0B001.d.6; 2A226; 2B350.g; 9A106.d): HS Heading 8481

Valves are widespread products used for heating and in water circulation systems, industrial machinery, transport, power plants, oil and gas extraction equipment, food industry, chemical industry, etc. Although they are widespread, only a few types of valves are included in the dual-use items control list, in particular, those manufactured from special materials and having certain dimensions, as they can be used in the transition or enrichment of uranium or the production of

corrosive chemical substances. The controls are also imposed on servo valves for missile equipment and for automatic control of the flow.

The following valves are subject to export, import and transit control:

- Bellows-sealed, shut-off or control valves made of or protected by materials resistant to corrosion by UF_6[43], with an inside diameter from 10 mm to 160 mm, specially designed or prepared for use in main or auxiliary systems of gas centrifuge enrichment plants (0B001(b.14.b);
- Bellows-sealed valves, manual or automated, shut-off or control valves, made of or protected by materials resistant to corrosion by UF_6, specially designed or prepared for the gaseous diffusion separation process (0B001.c.6);
- Bellows-sealed valves, manual or automated, shut-off or control valves, made of or protected by materials resistant to corrosion by UF_6, with a diameter of 40 mm or more, specially designed or prepared for the aerodynamic separation process (0B001.d.6).

The following valves are subject to export control:

- Bellows-sealed valves with a nominal size of 5 mm or more and wholly made of or lined with aluminum, aluminum alloy, nickel, or nickel alloy containing more than 60 % of nickel by weight (2A226)[44];
- Valves used in chemical manufacturing facilities and equipment with the nominal size of 10 mm or more, and valves with a nominal size equal to or more than 25.4 mm and equal to or less than 101.6 mm.

In addition, valves fall under control if a valve casing or all surfaces that come in direct contact with the chemical(s) being produced, processed, or contained are made from corrosion-resistant materials[45].

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[43] *Uranium fluoride is a mixture of uranium in a condition that is used to get enriched uranium by dividing its 235U and 238U isotopes. UF_6 is characterized by special corrosive and oxidative properties. Correspondingly, UF6 storage reservoirs, isotopes separation equipment and components of these devices should be made or coated with metals or materials that are resistant to corrosion by UF_6, in order to avoid accidents and radioactive disasters. These materials include copper, copper alloys, stainless steel, aluminum, aluminum oxide, aluminum alloys, nickel or alloys containing 60 % or more nickel by weight and fluorinated hydrocarbon polymers.*

[44] *For valves with different inlet and outlet diameters, the 'nominal size' refers to the smallest diameter in 2A226.*

[45] *Corrosion resistant materials means any of the following materials: a. nickel or alloys with more than 40% of nickel by weight; b. Alloys with more than 25% of nickel and 20% of chromium by weight; c. Fluor polymers (polymeric or elastomeric materials with more than 35% of fluorine by weight); d. Glass or glass-lined (including vitrified or enameled coating); e. Tantalum or tantalum alloys; f. Titanium or titanium alloys; g. Zirconium or zirconium alloys; h. Niobium (columbium) or niobium alloys; or i. Ceramic materials as follows: 1. Silicon carbide with a purity of 80% or more by weight; 2. Aluminum oxide (alumina) with a purity of 99.9% or more by weight; 3. Zirconium oxide (zirconia).*

- Servo valves designed for flow rates of propellants equal to or more than 24 liters per minute at an absolute pressure equal to or greater than 7 MPa that have an actuator response time of less than 100 ms (9A106.d);

Civil application:
- Sanitary ware
- Oil extraction
- Food Industry

Strategic application:
- Nuclear industry
- Missile technologies
- Chemical industry

Civil application:
Management systems for industrial robots, airplanes, machine tools

Strategic application:
Missiles

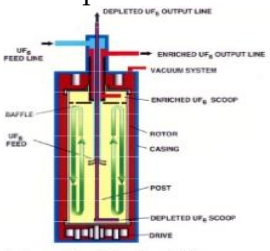
5.4.6. Centrifuges

(ECCNs 0B001; 2B122; 2B219; 2B352.c): HS Headings 8401, 8413, 8421

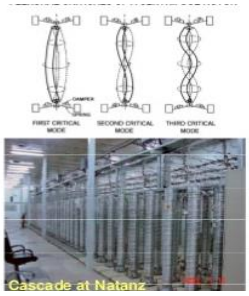
Centrifuge is a device that uses centripetal force to separate the distinctive density of gas, liquid or granular materials. Centrifuges are used in civil areas such as oil and gas extraction, medicine, laboratory surveys, testing, separation of ores and minerals, agriculture and so forth. The control list includes several types of centrifuges with different technical parameters that are used for uranium enrichment, separation of agents of chemical and biological weapons and testing of missile components.

Gas centrifuge is a device that makes it possible to separate gases with various molecular masses. Gas centrifugal technology is one of the most economical and effective methods of isotope separation and is widely used to enrich uranium with U-235 isotope.

There is so-called cylindrical shape rotary rotor placed in vacuum casing, which is supplied with uranium in the gaseous condition - Uranium hexafluoride (UF6). Under the influence of centripetal force generated by the rapid rotation of the rotor, which exceeds several hundred thousand times the gravity of the Earth, the gas begins to be divided into heavier (U-238) and light (U-235) fractions. In the lower axial tube placed in the rotor, the depleted U-238 molecules begin to gather, which are heavier, and the light U-235 will then fall into the centrifuges via upper axial tube until U-235 with the required concentration is received.



Schematic of Gas Centrifuge

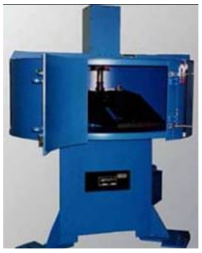


The speed of centrifuge rotation reaches 1,500-2,000 per second, which is 10 times higher than the rotation speed of the engine turbine (for comparison, the washing machine cylinder completes 1,000 rotations per minute). Centrifuge runs continuously for a period of three decades, and performs 2 trillion cycles during work cycles. At the same time, it works with very aggressive and corrosive substance - uranium hexafluoride.

The rotor rotates around the needle that relies on the corundum, and the upper part hangs in the air through the electromagnetic field, which is created by a magnetic suspension bearing (0B001.b.7). It is easy to guess that such a device and all its components should be made of tough special materials resistant to corrosion and mechanical impact.

Rotors can be manufactured by high-strength maraging steel, titanium, aluminum and aluminum alloys, carbon fibrous and filamentary materials, or nickel alloy containing more than 60% of nickel by weight. Manufactures in the form of tubes or cylindrical solid forms made from such materials are also included in the control list and therefore, they are subject to export control (1C202, 1C210, 1C216).

- Gas Centrifuge and all its components, as well as all technologies and software related to their design and use are subject to import, export and transit control (2B201, 2B204, 0D001, OE001).
- Centrifuges in which the container rotates at a very high speed to create centripetal force in order to enable this force to affect the container's inner part and impart acceleration above 100 g (gravity) are subject to export control, as they can be used to test missile details and to determine statistical characteristics of accelerometer.
- Centrifugal separators, capable of continuous separation with the flow rate exceeding 100 liters per hour, made of components of polished stainless steel or titanium with one or more sealing joints within the steam containment area capable of in-situ steam sterilization in a closed state are subject to export control, because through the separators it is possible to restore biological agents or toxins with such parameters;



Civil application:
- Medical
- Laboratory research
- Measurement, testing

Strategic application:
- Nuclear enrichment process

Strategic application:
- Separation of mixtures and compounds of chemical materials

5.4.7. Tritium
(ECCN 1C235): HS Heading 2844 40

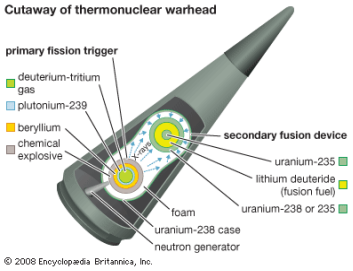
Tritium, or super heavy hydrogen, is a hydrogen radioactive isotope with symbol T or 3H. The value of its half-life is 4,500 ± 8 days (12.32 ± 0.02 years). It releases 18.6 keV of energy in the process of decay, while the share of Beta particles is 5.7 keV and they can penetrate only about 6.0 mm of air, being incapable of passing through the dead outermost layer of human skin. Due to their low energy, electrons emitted from the tritium are easily contained by clothing and surgical rubber gloves, but there is a radioactive threat while breathing, oral reception and absorption from the skin.

Tritium is widely used for civil purposes as a source of luminescence. Low-energy beta particles affect phosphorous materials and lead to their lighting. Due to these features, tritium is used in such devices as wrist clocks, targets, direction indicators, bellows, and so forth. Tritium is used in analytical chemistry and nuclear batteries to generate electricity. In addition, tritium, together with deuterium, is used to generate the neutron impulse to initiate the reaction of the nuclear reactor and in the hydrogen bombs – as thermonuclear fuel. Tritium is an important fuel for nuclear synthesis in some types of reactors.

Because of the importance of tritium in nuclear technologies, the control list includes tritium, tritium compounds, mixtures containing tritium in which the ratio of tritium to hydrogen atoms exceeds 1 part in 1,000, and products or devices containing any of the foregoing. All these products are subject to export, import and transit control[46].

Civil application:
- Wrist clock lights

Civil application:
- Direction indicator lights



Strategic application:
- Components for nuclear weapons

[46] *Note: the control list does not control a product or device containing less than 1,48 × 10 3 GBq (40 Ci) of tritium.*

5.5. Search methods and commodity identification

5.5.1. Structure and importance of correlation table

With the aim of simplifying the use of dual-use items control list and simplifying the identification of goods, the Customs Department of Georgia has developed a so-called correlation table, in which each item involved in the control list, is defined by an eleven-digit code of the national commodity nomenclature of foreign economic activities (hereinafter Harmonized System Commodity Code or HS commodity code).

The correlation table is approved by the order of Minister of Finance of Georgia No 292 of 30 September 2014. The table comprises 4 columns:

- The first column contains the commodity codes at the eleven-digit levels;
- In the second column, if this HS code does not belong to a particular item, the eleven-digit code name is given in the name of the heading (4-digit level HS commodity code), subheading (6-digit level HS commodity code) and sub-subheading (9-digit level HS commodity code) names of the code that are separated by the corresponding hyphen (for example, the following entries are made for HS commodity code 2844 10 100: - - natural uranium: - - - unwrought; waste and scrap);
- The third column contains the ECCN number, the Latin symbol denoting the paragraph and the number indicating the subsection (e.g. 1C450.a.7). The E, D symbol is indicated for products which may be subject to control due to transmission of technologies or software;
- The fourth column indicates the name and description of the product according to the ECCN, paragraph and subsection (e.g. toxic chemicals and toxic chemicals precursors such as: Chloropicrin: Trichloronitromethane (76-06-2).
  Note: It is noteworthy that the fourth column of the correlation table does not include "Notes", "Technical Notes" and "NB" in which the condition is often decisive for the identification of goods. Therefore, we need to get full text of the description defined for the products classified in a particular ECCN on the control list. For example, the correlation table does not contain "Note 3" for Trichloronitromethane, according to which 1C450 does not control chemical mixtures in which no individually specified chemical constitutes more than 1 % by the weight of the mixture.

One HS commodity code may be repeated several times in the table, which is due to the fact that the products with the same technical description may be found on the control list in different ECCN numbers or that various products or components of different denominations may be classified under one HS commodity code.
For example, HS commodity code 7219 32 100 00 (corrosion-resistant flat-rolled stainless steel) corresponds to the following entries on the control list: ECCN 1C116 and ECCN 1C216 for maraging steel, ECCN 1C118 for titanium-stabilized duplex stainless steel and ECCN 1A005 for components for body armor.

For a specific ECCN number, a table may contain a number of commodity HS codes derived from the specificity of the classification under the commodity nomenclature that the goods may be attributable under two or more commodity headings.

For example, on the control list, titanium-stabilized duplex stainless steel under ECCN 1C118 corresponds to the following entries in the control list correlation table: 7219 13 100 00, 7219 14 100 00, 7219 23 000 00, 7219 24 000 00, 7219 32 100 00 and 7219 35 100 00.

While using the correlation table, we must remember the following:

- If the product is classified under the commodity HS code in the correlation table, this does not always mean that it is a dual-use item;
- If a particular HS commodity code cannot be found in the correlation table, this does not always mean that it is not a dual-use item;
- The classification of items on the basis of the control list shall be carried out by determining the conformity of the technical characteristics of these goods with the technical characteristics indicated in the list and according to the explanations, technical specifications and comments indicated for this particular product, not by the commodity HS code.

The structure of the correlation table can be found in point 5.5.3.3.

5.5.2. Identification of the goods

We got familiar with the structure and principles of application of the control list and the correlation table and we can now look into what the identification of items means and how to make sure our products are dual-use goods.

Identification is the process of determining the conformity of the technical characteristics of specific goods with the technical characteristics of the similar goods on the control list and determining whether the goods are subject to export control. Identification of goods is often a difficult process and requires knowledge of a number of technical issues and acquaintance with the control list. The exporter/entrepreneur may perform identification by himself or may apply to the customs department with a written application[47].

Identification process can be divided into several parts:

5.5.2.1. Search and analysis of technical specifications, technical characteristics of goods, functional purposes, composition, sphere of use, etc.;

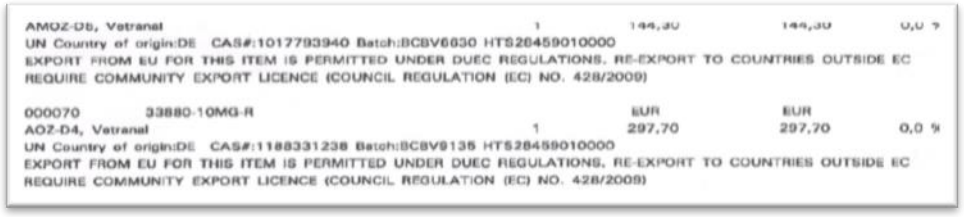
5.5.2.2. Search of the goods on the control list;

5.5.2.3. Comparison of the technical parameters of the same types of products and the conformity of the specific products given on the list.

[47] *In this case, identification should not be confused with the identification of goods for customs purposes, which means the determination of the conformity of the types, quantities, costs, weight and types of goods with the declared data in order to carry out customs procedures. Identification of goods is also carried out to determine the commodity HS code, prevent smuggling of goods and for fiscal purposes. For example, according to Article 213 of the Tax Code of Georgia, Georgian goods exported from the customs territory of Georgia may be returned within three years after declaration without the payment of export duties.*

5.5.2.1. Information about technical specifications and technical characteristics of goods, functional purposes, composition, spheres of use etc. can be established via various means and sources:

- Technical documentation (technical passport, MSDS, blueprints, charts, test protocols). The technical documentation must be perfect and the parameters in it are to be comparable with the characteristics of the same product on the control list;
- The manufacturer's website where the technical documentation, general descriptions of goods and the sphere of use can be found (although here have been cases, when the manufacturer changed the information posted on the website, concealing the strategic importance of the product). Occasionally, enterprises place information on the compliance of their products with the control lists (e.g. please follow the link: https://i.dell.com/sites/csdocuments/Legal_Docs/en/hts-eccn-ccats-2019-07.pdf
- Correspondence with manufacturers (the personal page of an enterprise often has the contact information and in practice we often ask about the parameters of particular items);
- Open sources (e.g. information provided by online stores about the goods, as well as identical and similar goods, information on metal alloys and chemical substances);
- The standards, which are applied when manufacturing the goods. Such standards are the International Standardization Organization Standards (ISO), CIS Regional (GOST), Germany (DIN), USA (ASTM) and other standards;
- Information on the product or packaging (e.g. stamps and marking, information boards on the devices, chemical composition of substances on the first or secondary packaging, etc.);
- The invoice (pro-forma invoice). Manufacturers often indicate in the invoice, which regulations are applied to particular goods. For example:


AMOZ-D6, Vetranal 1 144,30 144,30 0,0 %
UN Country of origin:DE CAS#:1017793940 Batch:BCBV6630 HTS28459010000
EXPORT FROM EU FOR THIS ITEM IS PERMITTED UNDER DUEC REGULATIONS. RE-EXPORT TO COUNTRIES OUTSIDE EC REQUIRE COMMUNITY EXPORT LICENCE (COUNCIL REGULATION (EC) NO. 428/2009)

000070 33880-10MG-R EUR EUR
AOZ-D4, Vetranal 1 297,70 297,70 0,0 %
UN Country of origin:DE CAS#:1188331238 Batch:BCBV9135 HTS28459010000
EXPORT FROM EU FOR THIS ITEM IS PERMITTED UNDER DUEC REGULATIONS. RE-EXPORT TO COUNTRIES OUTSIDE EC REQUIRE COMMUNITY EXPORT LICENCE (COUNCIL REGULATION (EC) NO. 428/2009)

- It should also be noted that introduction of such practices in all countries as well as the compliance of its products to the control lists and on the website, would somewhat simplify and facilitate the implementation of export control and customs procedures;
- Laboratory Research and Expertise - Accredited Laboratories and National Bureau of Experts operate in Georgia, enabling to draw certified conclusions on the technical parameters of some goods according to the legislation[48].

[48] http://gac.gov.ge/index.php?lang_id=GEO&sec_id=2, http://expertiza.gov.ge/page.html?page=acts&item=1081)

5.5.2.2. Products can be searched on the control list using several tools such as:

5.5.2.2.1. Search by type and industrial-technical use.

The use of this method requires a deeper knowledge and understanding of the control list and it is practiced by specialists and experts authorized on the product identification and issuance of licenses.

If we know the essence of export control, the specifics of the lists, the objectives of non-proliferation regimes, i.e. we know that the control list comprises the products based on their role in nuclear, chemical, biological weapons and technological cycles and their means of delivery.

We have discussed the structure of the control list and we saw that the dual-use goods are classified by ECCN numbers and each of the ECCN symbols indicates the product category, group and non-proliferation regime. As a result of the analysis of specific technical documents and other information related to particular items, the general technical denomination of goods, industrial and technical purposes, scope/field, functional, technical parameters and other data regarding the importance of ECCN numbers, we will be able to find the particular item in the control list.

5.5.2.2.2. Keyword search methods on the control list

The list of dual-use goods is approved by the Ordinance No 394 of the government of Georgia of 13 June 2014 and available to interested persons on official websites of various agencies; (e.g. see https://matsne.gov.ge/ka/document/view/2372203?publication=0).

Each product, machinery, systems, equipment, components, chemical and biological materials, etc. are included in the list in a way of single commonly recognized and specific technical name and not synonyms (e.g. "pump", "compressor", "pressure sensors" etc.);

The general technical names commonly used in the list to mark a group of products with the same properties are the main common features of this group, such as "ceramic base materials", "liquids and lubricants", "magnetic metals", "optical materials", etc.

In some instances, chemicals are listed by name and CAS number (US Chemical Abstracts Service) which is an individual registry number for all chemicals (e.g. sulphur monochloride (10025-67-9).

Note: According to general notes of the control list, CAS numbers cannot be used as unique identifiers, because some forms of the listed chemical have different CAS numbers, and mixtures containing a listed chemical may also have different CAS numbers.

Sometimes the name of the product is indicated in Latin letters on the control list (e.g. bacteria in 1C351.c, Bacillus anthracis, Chlamydia psittaci, etc.).

Given the abovementioned, you can find products on the control list using keywords: Write the text in the text search field without a suffix (e.g. "pump", "valve", "reservoir", "salmonella", "zirconium", "aluminum", "uranium", "10025-67-9" etc.) and search for a product in the entire text.

It is noteworthy that products with similar technical denominations and functions are often listed on the list several times under different categories, groups or non-proliferation regimes, and therefore, we can find the same entry several times. In this case, we have to choose the products that are closely related to our products.

5.5.2.2.3. Search method with commodity HS codes

For the implementation of customs procedures, it is very important to determine national commodity nomenclature of foreign economic activities for specific goods. The national commodity nomenclature of foreign economic activities has been prepared in compliance with the edition of 2017 of "The International Convention on the Harmonized Commodity Description and Coding System" and detailed in eleven-digit codes based on the specificity of the national economy. In the commodity nomenclature, goods are grouped according to their designation (e.g. clothing, weapons, pharmaceutical products, etc.) and economic sectors (e.g. live animals, plastics and their products, etc.). The commodity nomenclature consists of 22 gates, 99 groups, headings and subheadings, whilst commodity HS codes are detailed at the eleven-digit level. The national commodity nomenclature of foreign economic activities is used to carry out tariff (import tax) and non-tariff (permits, licenses, prohibitions, restrictions, etc.) measures for foreign economic activities, to carry out statistical accounting and to improve the exchange of statistical information.

In accordance with Article 211 of the Tax Code of Georgia, the commodity HS code shall be determined by the declarant. If we know, which commodity HS code a specific item is classified in, we can find products on the control list using the correlation table. The correlation table can be found on the following link:
https://matsne.gov.ge/ka/document/view/2520245?publication=0

Example 1: TANK (reservoir)

If the goods to be exported are black metal tanks for liquids, with volume less than 100,000 liters, the tank will be classified within the commodity HS code 7309 00 590 00. In order to find our product on the correlation list, we have to write this commodity HS code in the search field of the table (or filter of the first column of the table) and look for the relevant entries:

As a result, we have got all the products listed on the control list that are classified or may be classified by the declarer under the 7309 00 590 00 commodity HS code, in particular the reactor body and tank for the chemical industry defined by points "a" and "c" of ECCN 2B350.

7309 00 590 00	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 liters, whether or not lined or heat insulated, but not fitted with mechanical or thermal equipment.:– for liquids – of another capacity — — not exceeding 100 000 liters	2B350c	Chemical manufacturing facilities, equipment and components, as follows: Storage tanks, containers or receivers with a total internal (geometric) volume more than 0,1 m 3 (100 liters) where all surfaces that come in direct contact with the chemical(s) being processed or contained are made of any of the following materials: 1. Alloys with more than 25% of nickel and 20 % of chromium by weight; 2. Fluor polymers (polymeric or elastomeric materials with more than 35 % fluorine by weight); 3. Glass (including vitrified or enameled coatings or glass lining); 4. Nickel or alloys with more than 40% of nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; 7. Zirconium or zirconium alloys; or 8. Niobium (columbium) or niobium alloys.
7309 00 590 00	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 liters, whether or not lined or heat insulated, but not fitted with mechanical or thermal equipment.:– for liquids – of another capacity — — not exceeding 100 000 liters	2B350a	Chemical manufacturing facilities, equipment and components, as follows: Reaction vessels or reactors, with or without agitators, with total internal (geometric) volume more than 0,1 m 3 (100 liters) and less than 20 m 3 (20 000 liters), where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials: 1. Alloys with more than 25% of nickel and 20% of chromium by weight; 2. Fluor polymers (polymeric or elastomeric materials with more than 35% of fluorine by weight); 3. Glass (including vitrified or enameled coating or glass lining); 4. Nickel or alloys with more than 40% of nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; 7. Zirconium or zirconium alloys; or 8. Niobium (columbium) or niobium alloys;

The next step is to check full information and explanations (Notes, Technical Notes and N.B) of points "a" and "c" of ECCN 2B350 on the control list (Appendix 2 of Ordinance No 394 of the government of Georgia of 13 June 2014) and start the process of identification.

Example 1: VALVE

The valves, with some exceptions, are classified under heading 8481, while the shut-off valves, except for cast iron and steel valves - under the 8481 80 790 00 commodity HS code.

In order to find our product in the correlation list, we have to write this commodity HS code in the search field of the table (or filter of the first column of the table) and look for the relevant entries:

As a result, we have got all the products listed in the control list that are classified or may be classified by the declarer under the 8481 80 790 00 commodity HS code[49].

[49] NOTE: Since the National Commodity Nomenclature Codes (except the first six (or eight) digits of different countries) may differ from the National Commodity Nomenclature codes of Georgia, and in order to expedite the search scope and avoid errors in the search index, it is desirable to look for the products at the heading (first four digits) and subheading (first six digits) levels in the correlation table.

. 8481 80 790 00	Taps, cocks, valves and similar appliances, for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves:– other appliances:– – – – shut-off valves:— — — — — other	2A226	Valves having all of the following characteristics: a. A nominal size of 5 mm or more; b. Having a bellows seal; and c. Wholly made of or lined with aluminum, aluminum alloy, nickel, or nickel alloy containing more than 60% of nickel by weight.
8481 80 790 00	Taps, cocks, valves and similar appliances, for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves:– other appliances:– – – – shut-off valves:— — — — — other	2B350g	Chemical manufacturing facilities, equipment and components as follows: 1. Valves, having both of the following: a. A nominal size more than 10 mm (3/8"); and b. All surfaces that come in direct contact with the chemical(s) produced, processed, or contained are made of corrosion resistant materials; 2. Valves, other than those specified in 2B350.g.1., having all of the following: a. A nominal size equal to or more than 25,4 mm (1") and equal to or less than 101,6 mm (4); b. Casings (valve bodies) or preformed casing liners; c. A closure element designed to be interchangeable; and d. All surfaces of the casing (valve body) or preformed case liner that come in direct contact with the chemical(s) produced, processed, or contained and made of corrosion resistant materials; 3. Components, designed for valves specified in 2B350.g.1 or 2B350. g.2., in which all surfaces that come in direct contact with the chemical(s) produced, processed, or contained and made of corrosion resistant materials, as follows: a. Casings (valve bodies); b. Preformed casing liners;
8481 80 790 00	Taps, cocks, valves and similar appliances, for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves:– other appliances:– – – – shut-off valves:— — — — — other	0B001c	Plant for the separation of isotopes of natural uranium, depleted uranium or special fissile materials, and specially designed or prepared equipment and components therefor, as follows: c. Equipment and components, specially designed or prepared for gaseous diffusion separation process, as follows: 6. Bellows-sealed valves, manual or automated, shut-off or control, made of or protected by materials resistant to corrosion by UF 6;
8481 80 790 00	Taps, cocks, valves and similar appliances, for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves:– other appliances:– – – – shut-off valves:— — — — — other	0B001d	Plant for the separation of isotopes of natural uranium, depleted uranium or special fissile materials, and specially designed or prepared equipment and components therefor, as follows: d. Equipment and components, specially designed or prepared for aerodynamic separation process, as follows: 6. Bellows-sealed valves, manual or automated, shut-off or control, made of or protected by materials resistant to corrosion by UF 6 with a diameter of 40 mm or more;
8481 80 790 00	Taps, cocks, valves and similar appliances, for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves:– other appliances:– – – – shut-off valves:— — — — — other	7A116	Flight control systems and servo valves, as follows; designed or modified for use in space launched vehicles specified in 9A004 sounding rockets specified in 9A104 or missiles. a. Pneumatic, hydraulic, mechanical, electro-optical, or electro-mechanical flight control systems (including fly-by-wire and fly-by-light systems); b. Attitude control equipment; c. Flight control servo valves designed or modified for the systems specified in 7A116.a. or 7A116.b., and designed or modified to operate in a vibration environment larger than 10 g rms between 20 Hz and 2 kHz.
8481 80 790 00	Taps, cocks, valves and similar appliances, for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves:– other appliances:– – – – shut-off valves:— — — — — other	9A106d	Systems or components, other than those specified in 9A006 as follows, specially designed for liquid rocket propulsion or gel propellant rocket systems: d. Liquid, slurry and gel propellant (including oxidisers) control systems, and specially designed components therefor, usable in missiles, designed or modified to operate in vibration environments larger than 10 g rms between 20 Hz and 2 kHz.

5.5.3. Comparison of the technical parameters of the same type of product and the conformity of the specific products given on the list

After finding identical products or a specific product on the list, the crucial phase of the identification process is to compare the technical characteristics with the characteristics of the goods included on the list.

In such comparison, we should carefully look into the information on the controlled products on the list, because it is often crucial to pay attention to one of the key parameters by which it can be easily determined whether our goods are dual-use or not.

Now, let us discuss an example according to a specific contract:

Exporter: Georgian company;
Importer: Azerbaijani company;
Goods according to the contract: Wine production equipment and auxiliary equipment;
Goods according to the invoice: Tank (reservoir), brand ENOTANK;
Manufacturer of the goods: ALBRIGI TECHNOLOGIES, ITALY;
Open source: http://www.albrigi.com/ru/product/SP.40/Enotank
Commodity HS code: 7309 00 590 00.

Identification process:

- The reservoir is related to production, storage, mixing, etc. of any substance (in this case of wine). In addition, according to the manufacturer's specifications, Albrigi's reservoirs are also used in the chemical industry. That means that, according to categories, the product can be placed under Category 2 - Material Processing;
- According to the industrial/technical use, a reservoir is a manufacturing equipment or component of this device, through which we produce materials/substances (in this case wine), so it belongs to group B (Test, Inspection and Production Equipment);
- The manufacturer's website says that Albrigi's reservoirs are also used in chemical industries. Equipment and chemicals that can be used to get agents for chemical weapons are controlled by an Australia Group regime, indicating a third numerical symbol of ECCN number - 3.
- Thus, we have received the first three characters of the ECCN number of the control list: 2B3.

If we search for ECCN numbers on the control list that starts with 2B3, we will see that there are only three: 2B350, 2B351 and 2B352, and the product search area will be significantly reduced. Since our product is related to the chemical industry, it is most likely that what we have to look for is the ECCN 2B350 (chemical manufacturing facilities, equipment and components) and here is the result: On the control list, reservoirs used in the chemical industry are classified under point "c" of ECCN 2B350:

- 2B350.c - Storage tanks, containers or receivers with a total internal (geometric) volume larger than 0,1 m^3 (100 liters), where all surfaces that come in direct contact with the chemical(s) processed or contained are made of any of the following materials:

1. Alloys with more than 25% of nickel and 20% of chromium by weight;
2. Fluor polymers (polymeric or elastomeric materials with more than 35% of fluorine by weight);
3. Glass (including vitrified or enameled coatings or glass lining);

4. Nickel or alloys with more than 40% of nickel by weight;
5. Tantalum or tantalum alloys;
6. Titanium or titanium alloys;
7. Zirconium or zirconium alloys; or
8. Niobium (columbium) or niobium alloys;

To complete the identification process, we have to compare parameters given in ECCN number 2B350.c to the technical specifications of an ENOTANK reservoir:

ENOTANK capacity is 300 liters, the inner surface is coated in a mirror way and is not deposited. The material of which ENOTANK is produced is AISI 304/L alloy with the following chemical composition:

Alloy	C	Si	Mn	P≤	S≤	Cr	Mo	Ni	Other
304L	≤0.03	≤0.75	≤2.00	0.045	0.03	18-20	-	8-12	

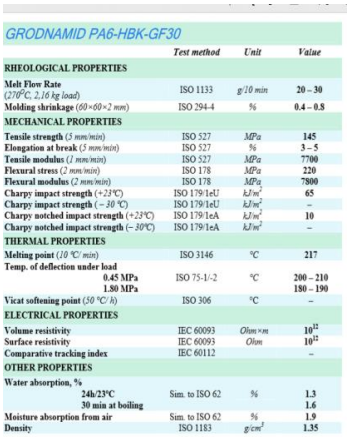
According to 2B350.c.1, the reservoir is controlled if the alloy under which it is manufactured, contains more than 25% of nickel and more than 20% of chromium. Alloy AISI 304/L contains 8-12% of nickel and 18-20% of chromium. Thus, the reservoir ENOTANK is not a dual-use product.

Now, let us discuss some examples of identification of goods according to technical parameters from Georgian export control practice:

5.5.4. Practical examples of identification process of the products against the control lists

5.5.4.1. POLYAMIDE FIBER *GRODNAMID PA6-GF30P1*

General information:
Description of goods: Glass Fiber **"Grodnamid Pa6-GF30P-1"**
Commodity HS code: 5402 19 000 00
Manufacturer: factory Chimvolokno, Grodno city, Belarus
Stored in one of the free industrial zones of Georgia
The holder of the goods intends to re-export



GRODNAMID PA6-HBK-GF30

	Test method	Unit	Value
RHEOLOGICAL PROPERTIES			
Melt Flow Rate (270°C, 2,16 kg load)	ISO 1133	g/10 min	20 – 30
Molding shrinkage (60×60×2 mm)	ISO 294-4	%	0.4 – 0.8
MECHANICAL PROPERTIES			
Tensile strength (5 mm/min)	ISO 527	MPa	145
Elongation at break (5 mm/min)	ISO 527	%	3 – 5
Tensile modulus (1 mm/min)	ISO 527	MPa	7700
Flexural stress (2 mm/min)	ISO 178	MPa	220
Flexural modulus (2 mm/min)	ISO 178	MPa	7800
Charpy impact strength (+23°C)	ISO 179/1eU	kJ/m²	65
Charpy impact strength (– 30 °C)	ISO 179/1eU	kJ/m²	–
Charpy notched impact strength (+23°C)	ISO 179/1eA	kJ/m²	10
Charpy notched impact strength (– 30°C)	ISO 179/1eA	kJ/m²	–
THERMAL PROPERTIES			
Melting point (10 °C/ min)	ISO 3146	°C	217
Temp. of deflection under load 0.45 MPa	ISO 75-1/-2	°C	200 – 210
1.80 MPa			180 – 190
Vicat softening point (50 °C/ h)	ISO 306	°C	–
ELECTRICAL PROPERTIES			
Volume resistivity	IEC 60093	Ohm×m	10^{12}
Surface resistivity	IEC 60093	Ohm	10^{12}
Comparative tracking index	IEC 60112		–
OTHER PROPERTIES			
Water absorption, % 24h/23°C	Sim. to ISO 62	%	1.3
30 min at boiling			1.6
Moisture absorption from air	Sim. to ISO 62	%	1.9
Density	ISO 1183	g/cm³	1.35

Mechanical characteristics according to the technical specification of goods:

- Tensile strength - 145 MPa;
- Tensile modulus (elasticity) - 7700 MPa; and
- Density - 1.35 g/cm^3.

By searching the keyword "fiber" on the control list and/or with the commodity HS code 5402 19 000 00 in the correlation, we find that similar fiber or filamentous materials are classified on the control list under ECCNs 1C010 and 1C210.

Since Grodnamid Pa6-GF30P-1 is a polyamide fiberglass, we have to compare its parameters to the parameters of glass fibrous and filamentary materials given in point "b" of ECCN 1C210.

According to point "b" of ECCN 1C210, glass fibrous and filamentary materials are subject to export control, if it has the following parameters:

1. Specific modulus exceeding 14.65×10^6 m; and
2. Specific tensile strength exceeding 26.82×10^4 m.

If we take an attentive look at the parameters of fibrous and filamentary materials of ECCNs 1C010 and aC210, we will notice that the parameters ("Specific modulus" and "Specific tensile strength") are given in length measurement units, while according to technical documentation annexed to Grodnamid Pa6-GF30P-1, parameters for tensile strength and tensile modulus are given in pressure measurement units (Pa) and density (specific weight) is given in g/cm^3.

According to the "Definition of Terms" section of the control list: "Specific modulus" is Young's modulus in Pascal, equivalent to N/m^2 divided by specific weight in N/m^3; and "Specific tensile strength" is ultimate tensile strength in Pascal, equivalent to N/m^2 divided by specific weight in N/m^3.

A little bit information from physics:

- Specific weight is the same as density;
- Young's modulus longitudinal elasticity modulus;
- 1 kg equals to 10 N; and
- 1 Pa equals to 1 N/m^2.

Identification of specific goods requires that the technical characteristics of these goods be identical to the parameters listed on the list. Therefore, firstly, the density of the Grodnamid Pa6-GF30P-1 (specific weight) is converted to N/m^3: 1,35 g/cm^3=1350 kg/m^3=13500 N/m^3=135x102 N/m^3.

Secondly, calculation of tensile strength and tensile modulus of Grodnamid Pa6-GF30P-1 is made and converted into meters: Specific modulus =$145x10^6 N/m^2$ / $135x10^2$ N/m^3=$0.0107x10^6$m (<26.82×10^4 m) and specific tensile strength =$77x10^8 N/m^2$ / $135x10^2$ N/m^3=$57x10^4$m (>14.65×10^6 m).

Taking into account that the necessary condition was to satisfy both parameters, the fibers were not subject to export control[50].

[50] Source of tech. spec.: http://grodno-khim.by/upload/iblock/ad3/PA6-HBK-GF30.pdf

5.5.4.2. Product: Toxic Gas Detector Ultima-X Series[51]

Commodity operation: Import
Commodity HS Code: 2927 10 100 00

The Ultima-X Series Gas Detector is designed to continuously monitor hazardous gases inside or outside a building.

Using the keyword ("toxic", "gas", "detect") on the control list or the commodity HS code in the correlation table (2927 10 100 00), we found that a similar device is classified under ECCN 2B351, having a certain technical parameter according to which it can be attributed to dual-use goods.

2B351: "Toxic gas monitoring systems and their detecting components, other than those specified in 1A004, as follows; and detectors; sensor devices; and replaceable sensor cartridges therefor:
a. Designed for continuous operation and usable for the detection of chemical warfare agents or chemicals specified in 1C350, at concentrations of less than 0,3 mg/m3; or
b. Designed for the detection of cholinesterase-inhibiting activities.

In accordance with the definitions above, to determine whether Ultima-X is subject to export controls or not it is necessary to identify a group of substances that can be detected by this device.

According to the technical documentation Ultima-X can control the following gases: oxygen, hydrogen sulfide, chlorine, nitric oxide, hydrogen cyanide (1C450), hydrogen chloride (T), chlorine dioxide (T), hydrogen fluoride (1C350), methane, propane, acetylene, carbon dioxide, phosphine (T), arsine (T), silane (T), diborane (T), brome, fluorine, ammonia, hydrogen, ethylene oxide, carbon monoxide, sulfur dioxide, nitrogen dioxide (1C111.a.3.b).

These are hazardous and fuel gases that are found in nature, for example: at oil and natural gas fields, etc. Hydrogen cyanide is a toxic chemical classified under ECCN 1C450, hydrogen fluoride (CAS #7664-39-3) is a chemical classified under ECCN 1C350.b that can be used as a precursor of toxic chemical agents, and phosphine can be considered as an anticholinesterase substance.

In accordance with the technical specifications, Ultima-X measures the content of hydrogen fluoride in the range of 0-10 ppm (parts per million) or 0-8.81 mg/m3, which means that it can be used to detect chemicals listed under ECCN 1C350 in concentrations less than 0.3 mg/m3.

As a result of the identification, it can be concluded that the Ultima-X is classified under ECCN 2B351.

Since ECCN 2B351 is not marked with an asterisk in the control list, this gas detector was allowed to be imported into Georgia without permit for dual-use items.

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[51] https://us.msasafety.com/Fixed-Gas-%26-Flame-Detection/Gas-Detectors/Ultima%C2%AE-X-Series-Gas-Monitors/p/000070001800001090
http://s7d9.scene7.com/is/content/minesafetyappliances/Ultima%20X%20Series%20Bid%20Specification
http://scorecard.goodguide.com/chemical-profiles/html/hydrogen_fluoride.html
http://www.adelphiinc.com/pdf/MSA/Ultima%20X%20Series%20datasheet.pdf

5.5.4.2. Detonating cord[52]

Item: Detonating cords with the trademarks Cordtex 5, Cordtex 10, Cordtex 40;
Commodity operation: Import
Commodity HS Code: 3603 00 900 00

Detonating cords Cordtex 5, Cordtex 10, Cordtex 40 are used to conduct explosions (mining, construction of tunnels and roads, etc.) by transmitting impulses to industrial explosive charges.

Using the keyword ("Detonator", "cord") on the control list and the specific commodity HS code in the correlation table, we found that detonating cords are classified under ECCN 1A008c* which must have an explosive core load more than 64 g/m;

In addition, point (c*) of ECCN 1A008 is marked with one asterisk, which means that this type of detonating cord with such technical parameters is subject to control in the case of import, transit and export.

According to the technical documentation, the detonating cords Cordtex 5, Cordtex 10, Cordtex 40, contain the explosive substance Pentaerythritoltetranitrate (PETN, CAS# 78-11-5 with the detonation speed of 6110-7520 m/s2) in the following quantities:

Cordtex 5 - 4.6-5.8 g/m
Cordtex 10 - 9.2-10.35 g/m
Cordtex 40 - 37.5-40.0 g/m

As we can see above, one meter of Cordtex detonating cord contains less than 64 grams of explosive substance and therefore is not subject to permit control[53].

[52] http://www.oricaminingservices.com/hk/en/product/products_and_services/delivery_systems/page_delivery_systems/cordtex_5p_detonating_cord/9

[53] *Note: the circulation of all types of industrial explosives is regulated by Government Decree No 432 of 31 December 2013 "On Explosion Safety and Technical Regulations", and permits to use industrial explosives are issued by the LEPL Technical and Construction Supervision Agency under the Ministry of Economy and Sustainable Development of Georgia.*

5.5.4.4. Item: Cisco DSC9148D-8G16P-K9 (network device-switch)[54]

Commodity HS code: 8517 62
Commodity operation: re-export.
Country of destination: Iran

A network device (the so-called switch) is a device designed to connect several nodes of a computer network in one or several network segments. The switch transmits data directly to the recipient device for which the data are intended and in addition, it has the function of protecting the information security of a computer network and its resources (protection against unauthorized entry).

Equipment with similar functions is classified under ECCN 5A002.a on the control list, namely:

Systems, equipment and components of information security designed or modified for data confidentiality (encryption) that uses a symmetric algorithm that employs a key length in excess of 56 bits and has cryptographic capabilities that can be used or activated via cryptographic activation so as not to use safety mechanisms, such as digital communication or network systems, devices and components.

According to the technical documentation, Cisco DSC9148D-8G16P-K9 uses the data decoding algorithm with the key length of 128-bit AES (advanced encryption standard). AES is a 128 bit symmetric algorithm with blocked encryption and the key length of 128/192/256 bits.

As a result of comparison of technical parameters, the switch Cisco DSC9148D-8G16P-K9 is a network device that uses a symmetrical algorithm with key length more than 56 bits and therefore, belongs to the controlled products classified in ECCN 5A002a.

If the applicant intends to export/re-export the products listed on the control list to the Islamic Republic of Iran, we should take into account the following:

1. According to UN SCR 2231/2015, if the goods are included in the lists stipulated in documents INFCIRC/254/Rev.12/Part1, INFCIRC/254/Rev.9/Part2 and S/2015/546, export to Iran is carried upon the prior consent of the UN Security Council; and

[54] https://pepd.cloudapps.cisco.com/legal/export/pepd/Search.do#!/ExportComplianceResult
https://www.cisco.com/c/en/us/about/legal/global-export-trade/general-export/contract-compliance.html
https://www.xcom-shop.ru/cisco_ds-c9148d-8g16p-k9_389203.html

2. The so-called two-asterisk (**) principle means that if export, import, transit, brokering services and technical assistance related to dual-use items are carried out to/from a country which is under the UNSC sanction/embargo, these items must be marked with two asterisks (**) and a permit is issued on the basis of the recommendation of the Standing Commission on Military-Technical Issues of the Ministry of Defense (Law No 1683, 11/29/2013, Article 10, Paragraph 2).

In this case, the Cisco DSC9148D-8G16P-K9 switch is not included in UNFCIRC/254/Rev.12/Part1, INFCIRC/254/Rev.9/Part2 and S/2015/546 documents, but since the UN sanctions are still applicable to Iran, the export of this item requires dual-use items export permit, which is issued based on the recommendation of the Standing Committee on Military-Technical Issues of the Ministry of Defense.

5.5.4.5. Centrifugal separator[55]

Item: Centrifuge: Model Flottweg Decanter Z 4E-4:
Commodity HS Code: 8421 21-8421 29
Commodity operation: re-export of temporarily imported items
Country of destination: The Netherlands

Centrifugal separators are used for the mechanical separation of solid and liquid (or light and heavy) substances from various types of mixtures and are used in almost all industries, including food, pharmaceutical, chemical, biotechnological, oil production, environmental treatment, etc.

These types of equipment can also be used to separate biological weapon agents and toxins from their cultivation areas. Correspondingly, as dual-use items, centrifugal separators are included in the control list and classified within ECCN 2B352.c. In particular:

Centrifugal separators, capable of continuous separation without the propagation of aerosols, having all the following characteristics:

1. Flow rate exceeding 100 liters per hour;
2. Components of polished stainless steel or titanium;

[55] https://www.flottweg.com/fileadmin/user_upload/data/pdf-downloads/Z3E_EN.pdf
https://www.flottweg.com/fileadmin/user_upload/data/pdf-downloads/Bioethanol-EN.pdf
https://www.flottweg.com/product-lines/decanter/c7e/
https://www.flottweg.com/fileadmin/user_upload/data/pdf-downloads/C7E-EN.pdf
https://www.flottweg.com/fileadmin/user_upload/data/pdf-downloads/Zentrifugen-Technik-EN.pdf

3. One or more sealing joints within the steam containment area; and
4. Materials capable of in situ steam sterilization in a closed state;

We compared the technical parameters of the Flottweg Decanter Z 4E-4 with similar parameters given in ECCN 2B352.c:

Separation: during 30 hours
Performance: 20 m³ / hour = 20000 L/hour;
Components are made of high quality stainless steel (SS AISI 316).

The technical document does not contain information about hermetic seals and the possibility of steam sterilization on site in the closed state.

As for efficient and safe segmentation/separation of biological agents, centrifugal separators must meet all four characteristics specified in ECCN 2B352.c, and therefore, the Decanter Z 4E-4 model does not belong to controlled items.

5.5.4.6. Chemical substance dimethyl sulfoxide[56]

Item: Chemical substance Dimethyl sulfoxide D6 (Dimethylsulfoxide-d6, CAS #2206-27-1)
Commodity HS Code: 2845 90 100 00
Commodity operation: Import

Dimethyl sulfoxide D6 is a dimethyl sulfoxide isotopologue (with the chemical formula: C2D6OS), where hydrogen atoms are replaced by deuterium isotopes.

Deuterated dimethyl sulfoxide is widely used as a solvent in nuclear magnetic resonance spectroscopy. Deuterium and deuterium compounds are widely used in nuclear power generation. Deuterium has the best quality for slowing down neutrons and deuterium and lithium compounds (lithium hydride) are used to conduct thermonuclear reactions in hydrogen bombs.

Because of this strategic importance, deuterium is classified under ECCN 0C003* in the dual-use items control list as follows: Deuterium, heavy water (deuterium oxide) and other compounds of deuterium, and mixtures and solutions containing deuterium, in which the isotopic ratio of deuterium to hydrogen exceeds 1:5 000.

Since ECCN 0C003* is marked with one asterisk (*), dimethyl sulfoxide-d6 deuterium compounds with high isotopic purity are subject to permit control in Georgia[57].

[56] https://www.sigmaaldrich.com/catalog/product/aldrich/547239?lang=en&region=GE

[57] *Note: in this particular case, the accuracy of product identification is confirmed by the manufacturer's invoice indicating that the export of this product from the EU is permitted on the basis of an export permit for dual-use items in accordance with EU regulation 428 (2009).*

5.6. Goods subject to import and transit permits (examples) and goods marked with * and **.

The geographical location of Georgia contributes to a large flow of goods transiting by rail and land in our country.

Georgian national legislation also provides for the control of import and transit of strategic items. The dual-use items control list identifies particularly sensitive items that require dual-use items permits for export, import, and transit. These items include, but are not limited to:

- Nuclear reactors" and specially designed or prepared equipment and components therefor;
- Natural uranium" or "depleted uranium" or thorium in the form of metal, alloy, chemical compound or concentrate;
- "special fissile materials";
- Some explosives, charges, detonators and their components;
- Equipment for the production of tritium and lithium and related equipment;
- Different types of high strength alloys (superalloys);
- Some types of radioactive substances;
- Some types of radar and location systems;
- Missiles and missile launchers.

Licensing control of the above items is based on interagency coordination. In particular, the Standing Committee on Military-Technical Issues of the Ministry of Defense issues a recommendation on export, import and transit, on the basis of which the Customs Department issues a permit for the export, import or transit of dual-use goods.

5.7. CATCH ALL clause

The dual-use items control list covers a wide range of strategic products, although there are still fewer strategic items that are not on the list, but that can be used in the design, development, and production of weapons of mass destruction and missile systems. These products may include test equipment, various types of machines, electronic parts and components, and more.

To solve this problem, the export control system of the USA, the European Union and several countries includes the so-called CATCH ALL control principle, which means licensed control of items not included in the control list, taking into account the end use and end user, as well as the country of destination of the items.

According to Georgian law, the "CATCH ALL" control principle is also applied in the practice of Georgian national export control.

In accordance with Article 4 of the Law of Georgia "on Control of Military and Dual-Use items" for the export of dual-use items not included in the control list, permit for dual-use items is required if:
a) The competent authority issuing the permit informed the exporter on the basis of a reasonable assumption that these items are intended or may be intended, in whole or in part, for use in connection with:
a.a) development, production, handling, operation, maintenance, storage, detection, identification, 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.
a.b) Military purposes, if the purchasing country or the country of destination is subject to an arms embargo imposed by a binding resolution of the Security Council of the UN, or based on other international obligations or commitments of Georgia, or an arms embargo adopted unilaterally by Georgia. Military purposes, in the meaning of this Article shall mean:
a.b.a) incorporation/installation of the items into military items as contained in the Control List.
a.b.b) use of production, test or analytical equipment and its components thereof, for the development, production or maintenance of military items as contained in the Control List
a.b.c) use of any unfinished products in a plant for the production of military items as contained in the Control List

SECTION 6: Definition of Dual-Use Permit

6.1. General definition of permits and licenses;
6.2. Terms and conditions for issuing permits;
6.3. Rules of obtaining dual use items permit online;
6.3.1. Registration on the website of the Revenue Service;
6.3.2. Fill out an application for a permit.

6.1. General definition of permits and licenses

According to Georgian legislation, if an activity or action is directly related to a threat to life or health or to state or public interests, government regulations regarding this activity or action are carried out through a license or permit. As already described in previous sections, the list of types of licenses and permits operating in Georgia, the rules for their amendment and cancellation are determined by the law of Georgia on licenses and permits. The license gives the right to carry out certain activities. The license is issued by the authorized administrative body of Georgia under the conditions established by law.

Licenses for certain activities and uses, as well as general and special licenses issued in Georgia, for example:

Licenses on certain activities are: licenses for nuclear and radioactive activities, licenses for producing biological pesticides, licenses for manufacturing, producing, repairing (including modernization and on-site services) and trading in military weapons, general licenses for trade in military products, etc.

Types of licenses to use are: Mineral extraction licenses, general licenses to use oil and gas resources, etc.

On the basis of a general license, the owner has the right to carry out several similar types of activities under this license and is not required to obtain a license for each type of activities separately.

The owner of a special license has the right to carry out the activities permitted by a special license without obtaining a license to regulate a wider range of activities.

The permit gives the right to take action for a certain or indefinite period and confirms that this action complies with the provisions of the law.

Sometimes for obtaining a permit, it is obligatory to provide a license for the relevant activity. For example: The import permit for radioactive materials implies the existence of a nuclear and radiation license for the recipient of radioactive materials.

6.2. Terms and conditions for issuing permits

The first stage: A dual-use items permit seeker submits an application and relevant documents to the customs department in electronic form.

The second stage: The customs department has three days to verify the application and attached documents.

The third stage: If the application or the attached documents do not contain sufficient information or they are incomplete, the customs department shall establish the deadline for the applicant to submit additional requested documents or information. This period must be at least 5 days.

During this time, the processing of application is suspended.

If the applicant needs more time to search for the necessary document or information, the customs department may extend the period only once, but for not more than 15 days. If the applicant cannot find and provide the requested document or information within the specified timeframes, the customs department has the right to leave the application without consideration.

The term of consideration of the application resumes after the submission of the relevant document or information.

The fourth stage: The licensing authority is obliged to carefully examine all the circumstances necessary for making a decision in accordance with the established criteria for obtaining permits.

If the licensing authority decides that the timeframes for issuing a permit is insufficient for examining all the circumstances (for example, for collecting information, obtaining documents, examining them, etc.), it has the right to extend the permit for three months. The applicant must be notified of the extension within 15 days of the receipt of the application.

Article 26 of the law of Georgia on licenses and permits envisages another three months for the extension of the period for issuing a permit on the basis of a government decree.

The fifth stage: If all information, application and necessary documents for issuing a permit are provided in full, the Customs Department is obliged to issue a permit within 20 days after the submission of the application.

In case of refusal to issue a permit, the applicant is notified of the refusal within 20 days from the date of receipt of the application.

The sixth stage: Upon the expiration of the deadline for issuing the permit, the Customs Department issues the permit in the electronic form.

A permit seeker has the right to communicate with the Customs Department through a representative. In this case, all the activities required to obtain a permit are performed by the representative.

For this purpose, the representative shall provide a document of his/her eligibility in addition to the application.

The fee for obtaining a permit for dual-use goods is 30 lari. The fee is paid in accordance with the law of Georgia on license and permit fees. The payment is made under treasury code 300773094.

6.3. Rules of obtaining dual use items permit online:

6.3.1. Registration on the website of the Revenue Service

Permit for dual-use items can be obtained online through the Revenue Service website http://rs.ge.

How you do this?

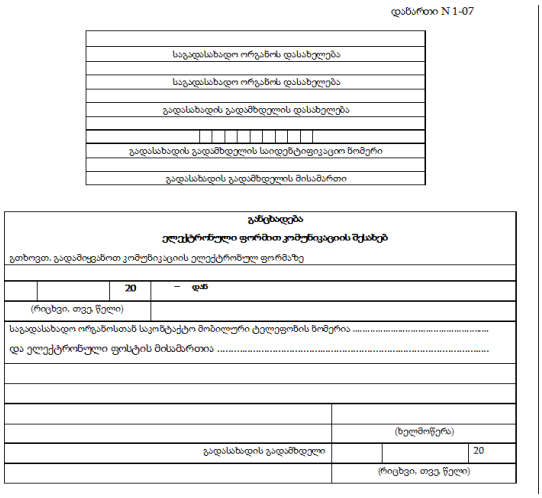
The rule for online communications between the Revenue Service and taxpayers are defined in Chapter III of Order No 996 of the Minister of Finance of Georgia "On Tax Administration" of 31 December 2010.

Communications between the Revenue Service and taxpayers (including the declaration) can be carried out in electronic form, online, and through the official website of the Revenue Service: www.rs.ge.

First of all, an entrepreneur/legal entity must register in the public registry of entrepreneurs and non-entrepreneurs (non-commercial) legal entities as legal entities under public law (LEPL) National Agency of Public Registry under the Ministry of Justice of Georgia.

You will receive a personal link to your email address during registration, where you can enter your email to request access to the Revenue Service website.

You can proceed to communicate electronically with the Revenue Service through a video call (https://eservices.rs.ge/Registration.aspx) or by means of a written statement (see the application form):



დანართი N 1-07

საგადასახადო ორგანოს დასახელება

საგადასახადო ორგანოს დასახელება

გადასახადის გადამხდელის დასახელება

გადასახადის გადამხდელის საიდენტიფიკაციო ნომერი

გადასახადის გადამხდელის მისამართი

განცხადება

ელექტრონული ფორმით კომუნიკაციის შესახებ

გთხოვთ, გადამიყვანოთ კომუნიკაციის ელექტრონულ ფორმაზე

20 – დან

(რიცხვი, თვე, წელი)

საგადასახადო ორგანოსთან საკონტაქტო მობილური ტელეფონის ნომერია .....

და ელექტრონული ფოსტის მისამართია .....

(ხელმოწერა)

გადასახადის გადამხდელი 20

(რიცხვი, თვე, წელი)

The application must include:

a) Title, name and surname of the taxpayer, identification number;

b) Contact phone number and email address;

c) The desired date for communication in the electronic form;

d) Signature of the taxpayer/his representative.

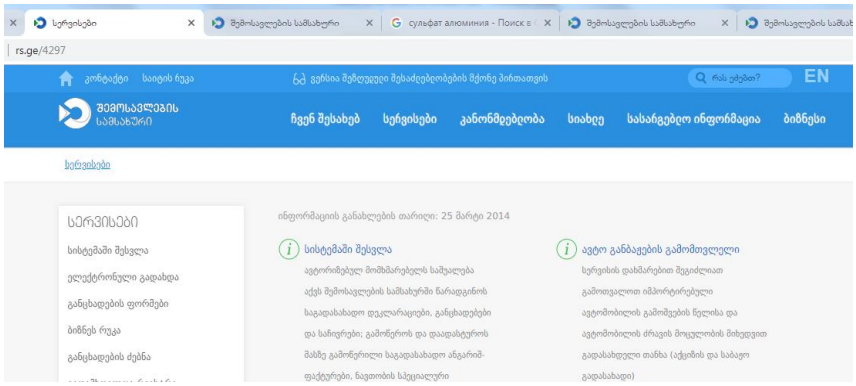
The application can be filed in any tax service center;

Within three working days from submitting the application, you will be able to receive electronic communication and be notified about the authorization with a short text message.

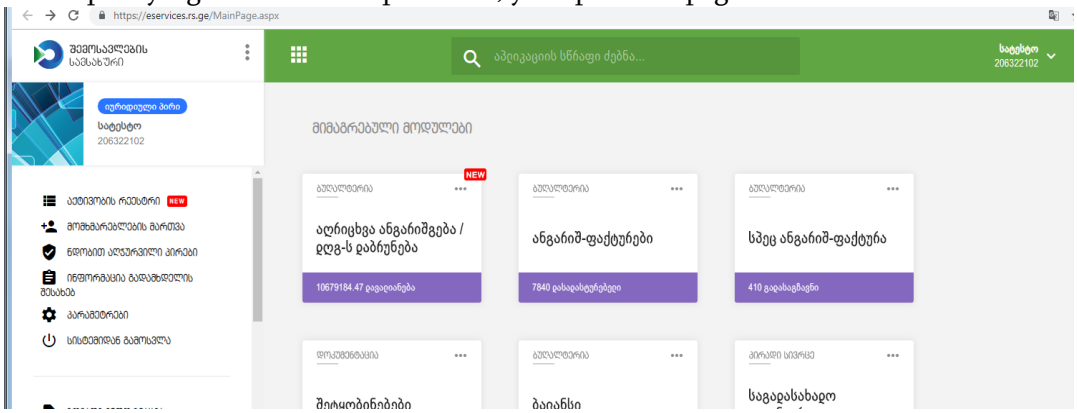
If you fill in the application form incorrectly, you will receive a written notice about the refusal of access to the official website of the Revenue Service.

After gaining access to the Revenue Service website, you already have a personal page from which you can electronically contact the customs department and upload an electronic application for obtaining a permit for dual-use goods.

On your personal page, you can visit www.rs.ge, by selecting "Services" in the horizontal menu and clicking on "Login".

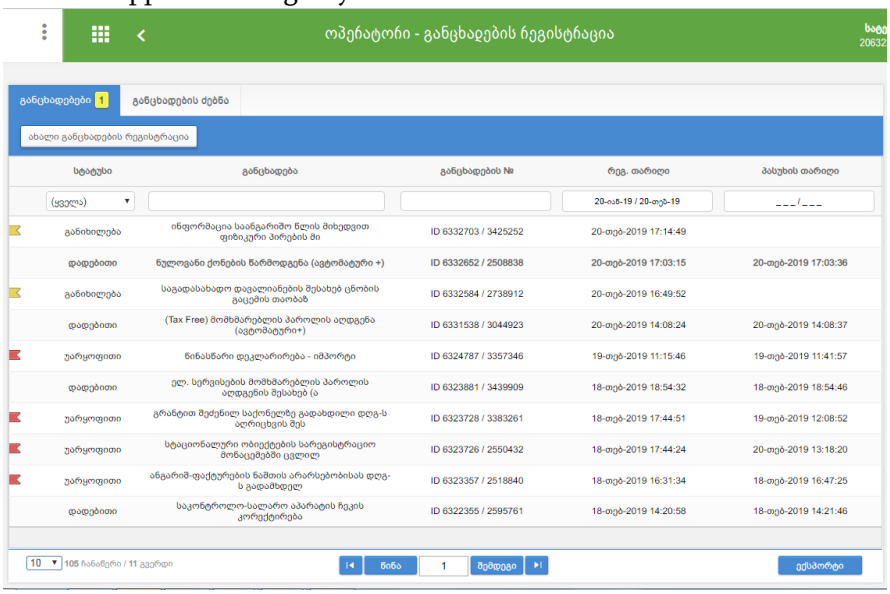


After specifying the name and password, your personal page will look like this:

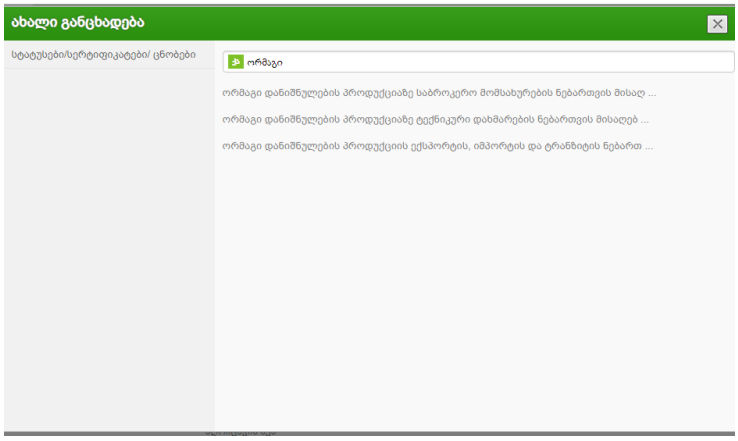


6.3.2. Fill out an application for a permit;

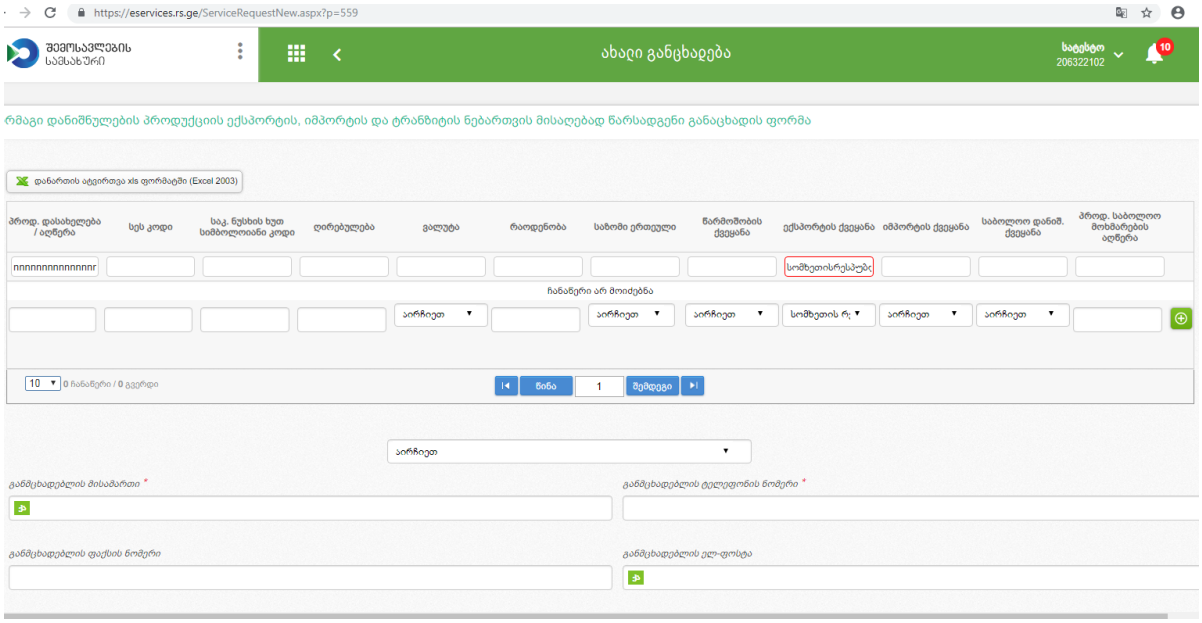
To find an application for dual-use items permit, type the keyword "applications" in the "Quick application search" box or click the  icon on the left of the green line and select "applications" from the drop-down menu.
Select "new application registry":



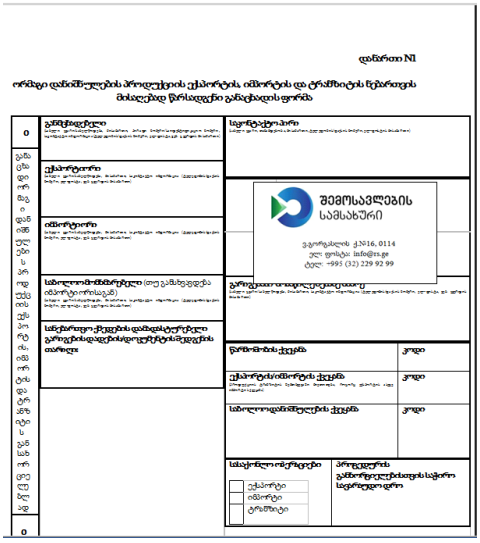
A window will appear displaying a list of ads. Enter the keyword "dual" in the search bar, and you will see various application forms that you must complete in order to obtain a permit.



Select the application form in accordance with the transaction you are performing. For example, "Application for export, import and transit of dual-use goods".



Electronic forms contain all fields that include application forms that must be filled to obtain a permit for import, transit, export, brokering service and technical assistance of dual-use items. These forms are approved by order of the Minister of Finance No 291 on the adoption of rules for issuing permits on export, import and transit of dual-use items; license forms and license application forms.



All fields that need to be filled out have a name, and therefore, filling this form is easy for an applicant.

The following boxes are used to describe the product and to submit information about the end user.

Box: ***Product Name/Description*** - the technical and trade name of the product, model, functional purpose, area of use and parameters by which the product is identified in the control list, etc. are indicated.

Box: Harmonized System (*HS*) Commodity *Co*de- An eleven-digit commodity HS code is indicated. It is determined in accordance with Decree No 241 of the Minister of Finance of Georgia of 11 July 2012 on the foreign economic activity national commodity nomenclature[58].

The issuance of a preliminary decision on the determination of the commodity HS code is a paid service, and the service charge (including VAT) is determined in accordance with the period of service provision. For making a decision within 30 working days, it is free of charge, 10 working days - 250 GEL, 5 working days - 500 GEL, in accordance with the Government Decree no 96 "On the approval of fees and their rates for the provision of services by a legal entity on public law - Revenue Service", of 30 March 2010.

Box: *ECCN number*: The ECCN number for a dual-use item is indicated and specified by the dual-use items control list, approved by Ordinance No 394 of the government of Georgia, of 13 June 2014[59].

Box: *Cost:* The agreed value of the goods is indicated;

Box: *Currency*: It is necessary to indicate the currency which is to be used for the purchase/sale transactions under the contract (select the bottom line);

Box: *Quantity of Permitted goods*: The quantity specified in the customs declaration shall not exceed the quantity of goods specified in the application. The quantity of goods specified in the application/permit may be indicated in several customs declarations and may be imported/exported in several shipments during the term of the permit;

Box: *Unit of measurement*: Select the appropriate unit of measurement in the bottom field;

Box: *Country of Origin*: Select the country of origin in the bottom field;

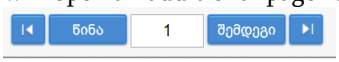
Box: *Country of export*: In the lower field, you can choose the name of the country which the item is exported from;

Box: *Country of import*: In the bottom field, you can select the name of the country, which the goods are imported into;

Box: *destination country*: The name of the country, where the goods will be used; the name can be selected in the lower field;

Box: *Description of final consumption of the goods*: In this field, the applicant must indicate the information that he/she possesses about the end-use of the goods.

It is important that all fields are filled with certain accuracy and that the data are compatible with the data specified in the customs declaration. One application can be filled for several items. Clicking the "Next" field will open an additional page for each subsequent product:

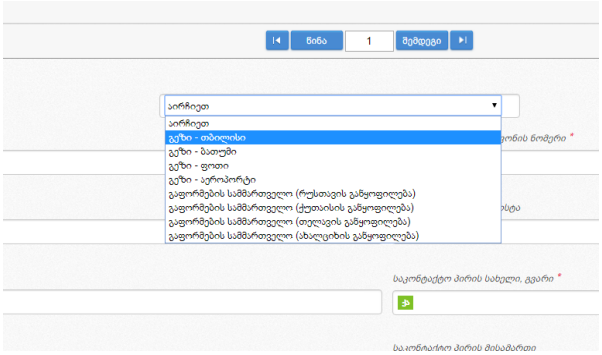


Clicking the "previous" field, you will return to the main page, and you can change the data and/or adjust the data.

[58] *Note: In accordance with Article 211 of the Tax Code of Georgia, "the commodity HS code is determined by the declarant." If you cannot determine the commodity HS code, you can contact the Revenue Service with a request to make a preliminary decision on the determination of the product code in accordance with the Foreign Economic Activity National Commodity Nomenclature. The procedure for making a preliminary decision is set forth in Article 20 of the Decree of the Minister of Finance of Georgia No 996 "On Tax Administration", of 31 December 2010.*

[59] *Note. If you cannot determine the ECCN number for the product, you can contact the customs department, which will determine the compliance of the goods with the goods listed in the dual-use items control list.*

In the next field, select the customs clearance zone where you want to obtain a permit. It is advisable to choose a customs clearance zone or a section in which you file a customs declaration.



The next fields are for information about the applicant, exporter, importer, end user, and third party involved in the transaction.

If you provide your products to multiple users or receive them from several senders or send them to different countries/receive from different countries, or the products are intended for several end users, you must complete a separate application for each specific case.

Boxes: Applicant's name, surname/title, address, personal/identification number, contact information (telephone/fax number, email address, website address), personal details of the person/representative should make it clear who fills out the application personally.

An authorized representative of an enterprise/organization shall act under the power of attorney granted by that enterprise/organization, and the authorized representative of a natural person shall act under a notarized power of attorney granted by that natural person or under any other document deemed equal to a power of attorney under the Civil Code of Georgia, within the scope of such power of attorney or another document (Tax code of Georgia, Article 37)

Boxes: The exporter's name/surname, address, contact information (phone/fax number, email address, website address), and other relevant information about the exporter must be provided.

In accordance with the legislation of Georgia, both residents and non-residents of Georgia have the right to export/import dual-use goods. However, they must be registered in the public registry of entrepreneurs and non-entrepreneurial (non-commercial) legal entities of Georgia and must have an identification number.

Personal number of an individual is used as his/her identification number.

Boxes: The contact person (name, surname, position, address, telephone/fax number, email address), relevant information about the employee (representative) of the exporting company must be submitted to enable the licensing authority to have a direct dialogue on the process of issuing a permit.

Boxes: Name, surname/title of the importer, address, contact information (telephone/fax number, email address, website address) and the end user's name, surname/title, address, contact information (phone/fax number, email address, web page), relevant information about the recipient in the country of import should be provided. The recipient and end-user of the product may often be different persons.

Boxes: It is necessary to submit the name, surname/title of the end user, contact information (telephone/fax number, e-mail address, website address), relevant information about the foreign company, which uses the products in accordance with their functional purposes for processing or installation in another device.

If the importer and the end user are the same person, the same information will be indicated in the boxes of the importer and end user.

Boxes: The third party name, surname/title address, contact information (phone/fax number, email, website address), relevant information about the third party is indicated, if it participates in the transaction (for example, it can be a carrier, broker, etc.).

Box: ***Estimated time to complete the procedure:*** Estimated date of import/export of goods to/from Georgia.

Then select the transaction for which you are requesting a permit:

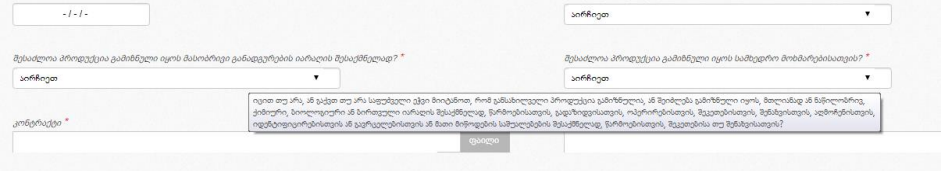
Import - includes the permanent or temporary import of foreign goods into Georgia or their establishment in inward processing or storage commodity operations, as well as entry to the free industrial zone located in the customs territory of Georgia.

Export - includes permanent or temporary export of goods from Georgia to a foreign country, or their establishment in outward processing or re-export commodity operations, export of goods from a free industrial zone located in the customs territory of Georgia to another country;

Transit- includes transportation of foreign goods from one country to another country through the customs territory of Georgia.

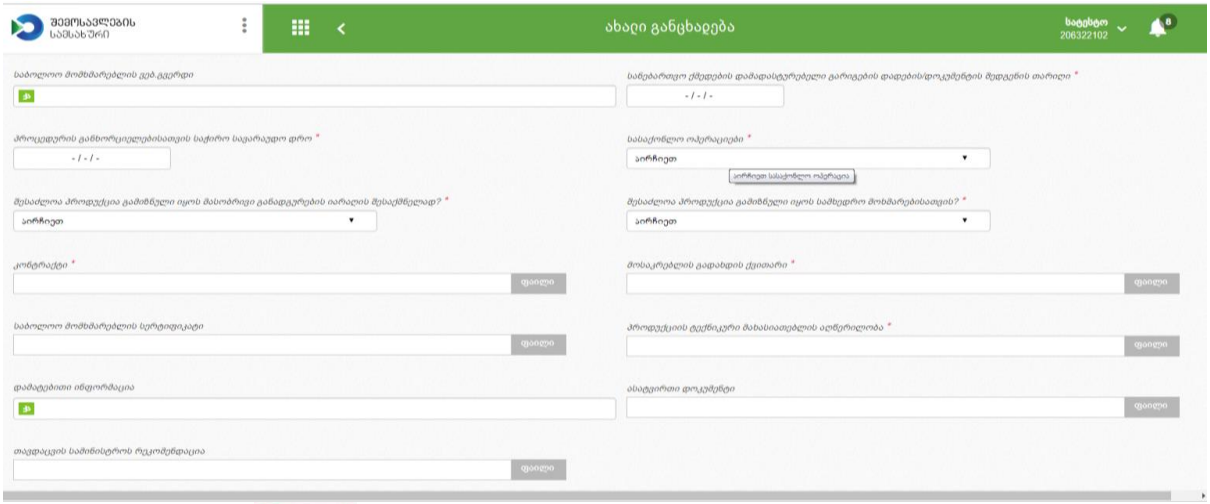
According to Georgian legislation, if the applicant knows or has a reasonable assumption that his products will be used in whole or partially to create weapons of mass destruction or for military purposes, he/she must notify the licensing authority.

If the questions in the boxes of the electronic application are as follows: "Are products intended to create weapons of mass destruction?" and "Are they intended for military use?" stop the cursor, and the full text of the question will appear, to which you will have to answer:



Remember: your sincere response is very important in the decision-making process for issuing a permit, and a wrong answer can be the basis for liability!

Boxes: Contract, payment receipt, end-user certificate, description of the technical specifications of the product, recommendation of the Ministry of Defense, the attached document – allows you to download the relevant document in the electronic form.



By clicking on the " გაგზავნა " button, the application will be sent to the customs department, and the licensing officer will start considering the application. If the decision is made to issue a permit, you will receive it in the electronic form[60].

It should be noted that in practice, an electronic application for a permit is often not filed properly or is not fully submitted, as a result of which the application is not accepted for further consideration. This often happens, for example: when in a box of prod. the name / description the scarce information is indicated on the permitted goods (often with only the commercial name of the product), incomplete and/or incorrect ECCN classification in accordance with the control list, insufficient quantities of documents in electronic form are attached to the application, etc.

60 *Note: The document/letter drawn up by an individual and a document submitted to the customs authority in the electronic form do not require the signature of an authorized person and have the same legal force as a written, signed and sealed document/letter in accordance with Paragraph 2 of Article 11 of the order of the Minister of Finance of Georgia No 996 on tax administration of 31 December 2010.*

SECTION 7: (Role of Customs Department in Export Control System as Licensing Authority)

7.1. The functions and structure of Customs Department

Customs have unique and very responsible duties in the world to control the continuous flow of persons, goods and vehicles across borders. In addition, customs play an important role in protecting society from the risks associated with the illegal movement of goods.

If the functions of the Customs Service were limited only to tax administration in the past, these obligations were significantly expanded and currently include:

- Administration of import duties;
- Protection of national economic interests;
- Protection of society and the environment by preventing illegal transportation and smuggling of dangerous and prohibited substances, firearms, drugs and waste on the border;
- Promotion of trade;
- Security protection (prevention of the spread of terrorism and weapons of mass destruction).

Correspondingly, the UNSCR 1540 (2004) calls on countries to fulfill their obligations under the Resolution and implement efficient border control measures regarding the circulation of materials, equipment and technologies subject to export control and to take legislative measures to detect the illicit transfer of such goods (Paragraph 3 (c)). Also, develop, review, maintain and update effective export and cross-border movement (transshipment) control mechanisms for such goods (Paragraph 3 (d)) at the national level, directly related to customs activities.

The functions of the Customs Department of the Revenue Service of Georgia include implementing trade policy measures for goods crossing the border and ensuring the protection of the requirements of the legislation of Georgia concerning imports of goods into the customs territory of Georgia and exports of goods from the customs territory of Georgia. Among them:

- Customs control over cash (national and/or foreign currency) and/or other securities with the total nominal value exceeding 30 000 GEL, when crossing the customs border of Georgia;
- Implementation of border control measures related to the protection of intellectual property;
- Veterinary border-quarantine, phytosanitary border-quarantine and sanitary-quarantine control on the Georgian economic border;
- Control over the movement of drugs and psychotropic substances, precursors and drugs under special control across the border;
- Protection of international trade rules for endangered species of wild fauna and flora"(CITES)";
- Licensing control and monitoring of civilian weapons, military products, nuclear and radioactive materials, radioactive waste, dual-use goods, hazardous chemicals, ozone-depleting substances, waste, pesticides and agrochemicals, as well as the import/export of Georgian cultural values;

- Control over the international movement of goods and passengers by land transport;
- Issuance of permits for the import and transit of products subject to veterinary control, and for the import of products of vegetal origin subject to phytosanitary control;
- Issuance of permits for import, transit, and export of dual-use items and related brokering service and technical assistance;
- Issuance of permits for the import of non-iodized salt;
- Issuance of a phytosanitary certificate and a phytosanitary certificate for re-export; veterinary certificates for export; hygienic certificate for packaging materials for food and food products; certificate of origin for goods leaving the customs territory of Georgia;
- Compliance with the rules adopted by the government of Georgia regarding compliance with the established technical characteristics of certain types of products (diesel, gasoline, construction materials, bitumen, mineral water, etc.).

One of the most important tasks in fulfilling obligations under international treaties, agreements and national legislation on the non-proliferation of weapons of mass destruction is to control the movement of dual-use goods across the border.

Customs control over the circulation of dual-use items is carried out by the Customs Department in accordance with the Tax Code, and export control regulations of Georgia.

The Customs Department is a structural unit of a legal entity of public law (LEPL) under the Ministry of Finance of Georgia, acting on behalf of the state in the performance of its functions.

The legal address of the department: 4, Soso (Koba) Abzianidze Street, Tbilisi.

The structure of the customs administration consists of 12 divisions exercising customs control, clearance of the goods and administration of taxes, identification and analysis of risks, development of risk profiles, verification of the requirements of Georgian legislation regarding non-tariff measures, product identification, control of permit conditions, etc.

The divisions of the customs department are:

- Service quality monitoring;
- Subsequent inspection of goods;
- Organization of customs control;
- Legal affairs;
- Customs Risk Management;
- Monitoring of goods;
- Customs value and Customs classification;
- Non-tariff control;
- Special equipment;
- Sanitary, phytosanitary and veterinary control;
- Cynology;
- Data processing.

The Non-Tariff Control Division plays an important role in the export control system, whose functions include issuing permits for dual-use items, making amendments and ensuring administrative procedures related to the cancellation of permits, identification of goods, identification of dual-use items in relation to the control list, the development of regulations, outreach activities for licensing customs officers working in customs control zones, as well as for business community.

Customs control procedures in relation to customs clearance, identification of goods and the issuance of permits are carried out in five customs clearance zones (CCZ) and its four branches:

- Telavi regional office (Telavi, 1 Erekle II Avenue, Tel: +995 32 226 23 29)
- Akhaltsikhe regional office (Akhaltsikhe, 54, Natenadze Str., Tel: +995 32 226 21 28);
- Kutaisi regional office (Kutaisi, 5, I. Javakhishvili Str., Tel: +995 32 226 18 99);
- Rustavi regional office (Rustavi, 36, Kostava Str., Tel: +995 32 226 21 11);
- Customs Clearance Zone (CCZ) "Tbilisi" (Tbilisi, bypass road 36 km. Gardabani municipality, Tel:+995 32 226 28 10);
- Customs Clearance Zone (CCZ) "Tbilisi 2" (Tbilisi, bypass road 36 km. Gardabani municipality, Tel:+995 32 226 28 20);
- Customs Clearance Zone (CCZ) "Batumi" (Senaki, Poti, Sarpi Highway 106 km. Khelvachauri municipality, Tel:+995 32 226 27 55);
- Customs Clearance Zone (CCZ) "Poti" (Poti, 32, Javakhishvili Str., Tel:+995 32 226 28 58);
- Customs Clearance Zone (CCZ) "Tbilisi Airport" (Tbilisi Airport adjacent territory, Tel:+995 32 226 28 58).

The structure of the customs includes 24 customs crossing points (CCP) (four of which operate in the Tbilisi Technological Park, Poti and Kutaisi free industrial zones), where the product identification, issuance of permits and control of fulfillment of permit conditions are carried out:

- Customs Crossing Point "Sadakhlo" Motorway (Georgia-Armenia Border);
- Customs Crossing Point "Sadakhlo" Railway (Georgia-Armenia Border);
- Customs Crossing Point "Red Bridge" (Georgia-Azerbaijan border);
- Customs Crossing Point "Red Bridge" (Georgia-Azerbaijan border);
- Customs Crossing Point "Gardabani" (Georgia-Azerbaijan border);
- Customs Crossing Point "Mtkvari" (Georgia-Azerbaijan border);
- Customs Crossing Point "Guguti" (Georgia-Armenia border);
- Customs Crossing Point "Lagodekhi" (Georgia-Azerbaijan border);
- Customs Crossing Point "Samtatskaro" (Georgia-Azerbaijan border);
- Customs Crossing Point "kazbegi" (Georgia-Russia border);
- Customs Crossing Point "Vale" (Georgia-Turkey border);
- Customs Crossing Point "Ninotsminda" (Georgia-Armenia border);
- Customs Crossing Point "Sarpi" (Georgia-turkey border);
- Customs Crossing Point "Kutaisi and Senaki Airports and Kutaisi free industrial zone";
- Customs Crossing Point "Batumi port";
- Customs Crossing Point "Poti and Kulevi sea ports and Poti free industrial zone";

- Customs Crossing Point "Tbilisi Airport and Free Industrial Zone of Tbilisi Technological Park";
- Customs Crossing Point "Batumi Airport";
- Customs Crossing Point "Kartsakhi-Akhalkalaki Railway" (Georgia-Turkey Border);
- Customs Crossing Point "Kartsakhi" (Georgia-Turkey Border).

7.2. Customs procedures

In the case of import/export of goods to/from the customs territory of Georgia, it is necessary to provide the customs with general information necessary for customs control procedures.

Goods are subject to customs supervision from the moment of import into the customs territory until the completion of customs clearance, as well as from the moment of customs clearance of goods until their export from the customs territory.

Before entry or in the case of import of goods into the customs territory or export of goods from the customs territory, goods are subject to customs clearance at customs crossing points, customs clearance zones, at the customs terminal or in other places specified by the Minister of Finance of Georgia.

The importer/exporter/freight forwarder/owner responsible for the transportation of dual-use items in the customs territory of Georgia must submit the following documents to customs:

- Transport document (CMR, TIR, Bill of Lading, Air/Rail waybill etc.);
- The original or copy of the purchase contract or invoice, or other relevant document;
  Note: in the absence of these documents, goods are subject to mandatory inspection and/or sampling, and the preparation of the relevant act.
- Dual use items import/export/transit permits[61];
- Permit (if required) to export and import radioactive materials, which can serve as raw materials for the production or generation of nuclear materials, equipment containing radioactive substances, nuclear technologies and know-how as well as export, import and transit of radioactive sources[62].

The following documents are required for the international carriage of dangerous goods by road:

- ARD driver training certificate; certificate of approval for vehicles carrying certain dangerous goods;

[61] *Note: In the case of import/export of dual-use items marked with one (*) or two (**) asterisks by persons exempted from the obligation to obtain permits in accordance with the ordinance of the government of Georgia, are still required to submit recommendations issued by Standing Commission on Military-Technical Issues of the Ministry of Defense of Georgia;*

[62] *Note: This permit is submitted, if the goods are simultaneously subject to the law of Georgia on nuclear and radiation safety and the law of Georgia on control of military and dual-use goods. These may be, for example, special fissile materials and various radio nuclides.*

- Certificate of periodic inspection and testing of vehicles[63].
- Permit/authorization for the international carriage of goods by road determined by multilateral international and bilateral agreements of Georgia.

Annex VII-1: Correlation table of ADR related and dual-use items:

UN №	Description	CAS №	ECCN	HS code
0030 0255 0456	Electrically driven explosive detonators		1A007*.b	3603 00 900 00
0059 0439 0440 0441	Charges without cumulative detonation		1A008.a	3602 00 000 00
0065 0102 0104 0106 0107 0257 0289 0290 0367 0408-0410	Detonating cord		1A008.c*	3603 00 100 00 3603 00 900 00
2032	Inhibited Red Fuming Nitric Acid (IRFNA)	8007-58-7	1C111.a.3.e	2808 00 000 00
0075	Diethylene glycol dinitrate (DEGDN)	693-21-0	1C111.c.5	2909 49 800 00 2909 19 900 00 2905 59 990 00
0282	Nitroguanidine (NQ)	556-88-7	1C011.d	2929 90 000 00 3602 00 000 00
1032 1160	Dimethylamine	124-40-3	1C350.16	2921 11 001 00
1046	Helium-3 (3He)	7440-59-7	1C232	2804 29 100 00
1051	Hydrogen cyanide	74-90-8	1C450.a.6	2811 12 000 00
1052 1790	Hydrogen fluoride	7664-39-3	1C350.24	2811 11 000 00
1067	Nitrogen dioxide	10102-44-0	1C111.a.3.b	2811 29 300 00
1067	Dinitrogen tetroxide	10544-72-	1C111.a.3.b	2811 29 300 00

[63] *Note: These documents are required if dual-use items comprise dangerous goods in accordance with the European Agreement concerning the International Carriage of Dangerous Goods by Road (Geneva, 30 September 1957) and Georgian legislation: For example, potassium cyanide (CAS 151-50-8, UN1680), corresponds to ECCN 1C350.40), chlorine (CAS 76-06-2, UN 1580), corresponds to ECCN 1C450.a.7 etc.).*

		6		
1975	Mixed Oxides of Nitrogen (MON)		1C111.a.3.d	2811 29 300 00 2811 29 900 00
1076	Phosgene: Carbonyl dichloride	75-44-5	1C450.a.4	2812 11 000 00
1135	2-Chloroethanol	107-07-3	1C350.15	2905 59 980 00
1154	Diethylamine	109-89-7	1C350.64	2921 19 500 00
1158	Di-isopropylamine	108-18-9	1C350.48	2921 19 990 00
1336	Nitroguanidine (NQ)	556-88-7	1C011.d	2925 29 000 00
1340	Phosphorus pentasulphide	1314-80-3	1C350.47	2813 90 100 00
2814	Human pathogens		1C351	3002 90 500 00 3002 90 900 00
2900	Animal pathogens		1C351	3002 90 500 00 3002 90 900 00
3373	Viruses		1C351	3002 90 500 00 3002 90 900 00
3172	"Toxins" and "sub-unit of toxins" thereof		1C351.d	3002 90 500 00 3002 90 900 00
3245	Genetic elements and genetically modified organisms		1C353	3002 90 500 00 3002 90 900 00
1358 2008	Zirconium powder	7440-67-7	1C011.a 1C111.a.2.a	8109 20 000 00
1385	Sodium sulphide	1313-82-2	1C350.50	2830 10 000 00
1396	Aluminum powder	7429-90-5	1C111.a.1	7603 10 000 00 7603 20 000 00
1401	Calcium	7440-70-2	1C227	2805 12 000 00
1415	Lithium	7439-93-2	1C233	2805 19 900 00
1415	Lithium-6 (6Li)	14258-72-1	1C233	2845 90 900 00
1418	Magnesium powder	7439-95-4	1C011.a 1C111.a.2.c	8104 30 000 00
1467	Guanidine nitrate	506-93-4	1C011.c	2925 29 000 00
1560	Arsenic trichloride	7784-34-1	1C350.31	2812 19 900 00
1567	Beryllium powder	7440-41-7	1C111.a.2.b	8112 12 000 00
1580 1581 1582 1583	Chloropicrin: Trichloronitromethane	76-06-2	1C450.a.7	2904 91 000 00
1589	Cyanogen chloride	506-77-4	1C450.a.5	2853 10 000 00
1614	Hydrogen cyanide	74-90-8	1C450.a.6	2811 12 000 00
1680 3413	Potassium cyanide	151-50-8	1C350.40*	2837 19 000 00
1689 3414	Sodium cyanide	143-33-9	1C350.45*	2837 11 000 00
1690 3415	Sodium fluoride	7681-49-4	1C350.43	2826 19 100 00

1727 2817	Ammonium hydrogen fluoride or ammonium bifluoride	1341-49-7	1C350.42	2826 19 900 00
1749	Chlorine trifluoride (ClF3)	7790-91-2	1C238	2812 90 000 00
1806	Phosphorus pentachloride	10026-13-8	1C350.38	2812 14 000 00
1809	Phosphorus trichloride	7719-12-2	1C350.7	2812 13 000 00
1810	Phosphorus oxychloride	10025-87-3	1C350.2	2812 12 000 00
1811	Potassium bifluoride	7789-29-9	1C350.41	2826 19 900 00
1812	Potassium fluoride	7789-23-3	1C350.14	2826 19 900 00
1828	Sulphur dichloride	10545-99-0	1C350.52	2812 16 000 00
1828	Sulphur monochloride	10025-67-9	1C350.51	2812 15 000 00
1836	Thionyl chloride	7719-09-7	1C350.9	2812 17 000 00
1849	Sodium sulphide	1313-82-2	1C350.50	2830 10 000 00
1869	Magnesium	7439-95-4	1C228	8104 11 000 00
1957	Deuterium	7782-39-0	0C003	2845 90 100 00
2323	Triethyl phosphite	122-52-1	1C350.30	2920 24 000 00
2329	Trimethyl phosphite (TMP)	121-45-9	1C350.8	2920 23 000 00
2421	Dinitrogen trioxide	10544-73-7	1C111.a.3.a	2811 29 300 00
2439	Sodium bifluoride	1333-83-1	1C350.44	2826 19 900 00 2826 19 100 00
2674	Sodium hexafluorosilicate	16893-85-9	1C350.62	2826 90 800 00
2686	Diethylaminoethanol	100-37-8	1C350.49	2922 19 000 00
2977 2978	Radioactive material: uranium hexafluoride (UF_6)	7783-81-5	0C001 0C002	2844 10 300 00
3294	Hydrogen cyanide	74-90-8	1C450.a.6	2811 12 000 00
3421	Potassium bifluoride	7789-29-9	1C350.41	2826 19 900 00
3422	Potassium fluoride	7789-23-3	1C350.14	2826 19 900 00

Permits for dual-use items and other permits uploaded to the unified electronic system of licenses, permits and certificates are considered to be submitted to the customs crossing point and permit holders are not obliged to present them in the form of a hard copy.

If the permit to import dual-use items to the customs territory of Georgia is not submitted to customs within three working days from the moment customs procedures are completed, the declarant will be provided with three working days to submit a permit or return goods within a certain period of time. (For goods imported by sea - the period must coincide with the period for determining the commodity operation). If the declarant does not submit the permit at the appointed time, the Customs Department will transfer the goods to state ownership or ensure the destruction of the goods by the owner/customs warehouse.

A permit is not required for goods needed to respond to emergencies, trainings/exercises or repair work aimed at preventing accidents on pipelines and power lines, as well as in the case of temporary import and export of equipment in emergency situations. In this case, only information on goods and vehicles is provided to customs.

In the case of import/export of goods to/from the customs territory of Georgia, the time limits for delivery of goods and vehicles from the border-crossing point to the customs clearance zone are defined as 100 km per day, but not more than 10 calendar days.

The transit of goods through the customs territory of Georgia must be carried out within 20 calendar days (in the case of temporary storage of goods in a customs warehouse or customs terminal, 20-day countdown is stopped and will be extended upon the completion of temporary storage commodity operation).

The movement of goods and vehicles between customs control zones is carried out under customs supervision through an electronic register. The declaration of dual-use items subject to licensing is carried out by submitting a customs declaration in advance or upon import/export of goods.

At the time of customs clearance of dual-use goods with a declaration, the following documents are submitted to the customs authority.

- Dual use items permit. Furthermore, in the case of export, this permit may be presented in the form of certified and signed hard copy by the declarant[64];
- Transport Document;
- Purchase contract, proforma invoice or another transaction document;
- A document confirming the representation; if the declaration is made through a representative (except in cases where the representation is carried out by a postal carrier, and for goods in the warehouse - the owner of a permit for the operation of a customs warehouse);
- Reports on a tax or administrative offense and a document confirming the payment of a fine, if a tax or administrative violation has occurred in relation to the declared goods or means of transport;
- Preliminary Document (if any) - customs declaration, certificate, application;
- Documents confirming tax benefits;
- License/permit/certificate, if defined by law. In case of export, these documents may be submitted in the form of certified and signed copy by the declarant.

[64] *Note: In the case of import/export of dual-use items marked with one (*) or two (**) asterisks by persons exempted from the obligation to obtain a permit in accordance with the ordinance of the government of Georgia, are nevertheless required to submit recommendation issued by Standing Military-Technical Issues Commission of the Ministry of Defense of Georgia.*

The Tax Code of Georgia provides for liability in the form of fines for violations of the deadlines for the presentation and declaration of goods, violations of the integrity of the seal, circumvention of customs control over the transportation of goods and vehicles and other customs violations.

To determine whether the goods are included in the control list and are subject to licensing, the owner of the goods can contact the customs department in a written form before submitting the declaration.

In order to get a comprehensive answer, along with a written application, it is important to provide a technical description of the product, including the parameters necessary for the identification of goods against the control list, information about the manufacturer, sender and recipient, end-use and end-user, commercial document certifying the transaction and documentation containing other relevant information.

If the customs authority is not able to identify the goods in accordance with the technical documentation, it is authorized to take samples necessary for inspection, schedule an examination, request the owner of the goods to obtain the opinion of the National Bureau of Expertize or an accredited laboratory, request technical assistance or conduct an inspection using available technical tools.

It is important to know: under Georgian law, the customs authority has the exclusive right to suspend cargo subject to licensing. In accordance with paragraph 2 of Article 15 of the Law of Georgia “on Control of Military and Dual Use items “, The Revenue Service is authorized to suspend export, import, transit of products if new circumstances arise or those that need to be verified by the competent authority and which would be impossible to take into account when issuing permit.

In this case, the Revenue Service forwards the case to the pertinent competent authority for reconsideration".

SECTION 8: Exporters' Commitments and Obligations with respect to Export Controls

If we look at the history of the creation and proliferation of weapons of mass destruction and missile technologies, we will see that one of the main aspects of this process was legal or illegal trade in dual-use goods.

Stakeholders, often with government support, created complex networks with complex geography, and after the goods were sold and transferred several times from country to country, seemingly harmless products were found in the hands of those who used them to build nuclear bombs, ballistic and cruise missiles, biological, chemical or other weapons for terrorist purposes, even on a small scale, but for actions detrimental to society and leading to fatal consequences.

Even today, despite the sanctions/embargoes against some countries, these countries still manage to acquire the necessary materials and equipment and use them for military purposes. For example, North Korea has made impressive progress in developing a missile program, and it is well known that this result was obtained through the acquisition of highly efficient liquid-fuel engines from foreign sources. The modern world is concerned about the tragic cases associated with the illegal use of radioactive, chemical and biological materials. For example:

The use of chemical weapons in Syria: in 2011-2018, the UN Commission observed 33 cases of chemical attacks. This led to serious consequences in one of the last cases of use in the city of Douma, on 7 April 2018, when 70 people died and several hundred people were severely poisoned. According to the reported information, poisoning was caused by the use of Sarin bombs. (According to a version, chlorine bombs were also used).

According to various sources, these could be so-called barrel bombs, solid cylindrical condensers with explosives filled with debris and/or poisonous gas, in which fertilizers, ammonium nitrate and fuel mixtures are used for the explosion, for example, ANFO (ammonium nitrate/fuel oil), which is well known to those who trade in or use industrial explosives, can be used for an explosion, and Sarin, like ordinary chlorine, can function as a poison gas. Chlorine as a chemical weapon was first used in World War I by Germans. This gas is heavier than air and inhalation causes asphyxiation and damage to lung tissues.

Chemical attack in the Tokyo subway: it was a terrorist attack committed with the help of a nervous agent Sarin. It was carried out by Aum Shinrikyo, a Japanese doomsday cult, founded by Shoko Asahara in 1984. It was also established that this terrorist group was responsible for another small Sarin attack in the previous year. According to various sources, from 10 to 27 people died and from 5,000 to 6,300 people received various degrees of poisoning. It turned out later that the sect members themselves prepared Sarin and production technologies were purchased from Russia.

The poisoning of Alexander Litvinenko with the radioactive substance Polonium-210 in 2006 and the Salisbury attack, when the nervous agent, the so-called military toxic substance Novichok A-234 was used to poison Sergei and Yulia Skripals, led to political scandals.

The examples above illustrate how dangerous trade and use of certain categories of goods can be for the world and therefore, people involved in international trade should be well aware of their role in international security and peace.

An efficient system of control over dual-use items should include the involvement of representatives of business and all spheres of society and should not be limited only to state licensing control and coercive measures.

Administrative bodies, individuals, and other organizational entities have the right to trade in dual-use goods and are bound by obligations established by the legislation of Georgia. In this section, you will receive information about these obligations and rights, as well as some tips on how to avoid obstacles to customs procedures.

Permits for dual-use items must be obtained by a person involved in international trade if he/she:

- Performs temporary or constant export of dual-use items from Georgia or supplies computer programs and/or technologies specified in the control list to another country or to any non-resident in Georgia or an organizational unit (exporter);
- Performs temporary or permanent import of specified categories of dual-use items (marked with one (*) or two (**) asterisks on the control list) (importer);
- Performs transit through the customs territory of Georgia of dual-use items (marked with one (*) or two (**) asterisks on the control list);
- Organizes services for the purchase, sale or delivery of items from outside the customs territory of Georgia to another destination outside the customs territory of Georgia, including official negotiations (broker);
  Note: Brokering services do not include ancillary services such as shipments, financial services, insurance and reinsurance, general advertising and support;
- Organizes any technical support associated with the repair, development, manufacture, assembly, testing, maintenance or any other technical services. This may take such forms as instruction, training/exercises, transfer of working knowledge and skills, or consulting services. Technical assistance includes any oral forms of assistance.

<u>It is important to know that:</u>

If an exporter, importer, freight forwarder, broker or technical assistance provider finds out that products or services are to be used for military purposes or to create, develop, maintain, use, detect and spread biological, chemical, nuclear weapons or any other explosive device or delivery system for carrying any of such weapon, he/she must immediately notify the licensing authority[65].

[65] *Note: Use for military purpose means:*

- *Installation in military products, determined by the control list;*
- *The use of production, test or analytical equipment and its components for the development, manufacture or maintenance of military items;*
- *The use of any semi-finished products for the production of military items determined by the control list.*

The rights and obligations of the permit seekers are determined by the law of Georgia on control of military and dual-use items and government Decree No 372 on the determination of control measures over military and dual use items. Permit seekers must directly perform the actions defined by the permit. In the case of transit, the permit seeker may be both the owner and the carrier of the goods.

8.1. Documents required in the case of export, technical assistance and brokering services

The person requesting a permit must submit to the Customs Department the following documents in the electronic form (in exceptional cases or if it is technically impossible to provide documents electronically, it is permissible to provide hard copies of documents):

- Application[66];
- Extract from the Registry of Entrepreneurs and Non-Entrepreneurial (Non-commercial) Legal Entities or copies of documents confirming identity in accordance with the legislation of Georgia. A legal entity under public law (LEPL) must attach certified copies of constituent documents in addition to the application[67];
- Document confirming payment of the permit fee[68];
- Original or certified copy of the transaction, purchase document (contract, invoice) confirming the actions determined by the permit;
- Description of technical specifications (technical documentation, MSDS etc.) of a product[69].
- The recommendation of the Standing Commission on Military-Technical Issues of the Ministry of Defense of Georgia, if the dual-use items included in the control list are marked with one (*) or two (**) asterisks, and/or there is a reasonable assumption that the goods will be used to create weapons of mass destruction or for military purposes in the destination country[70];
- End-user certificate issued by the country of import or its certified copy[71];
- Other documentation required by the licensing authority that is to make a decision;

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66 *Note: Submission of applications for permits, registration and consideration is carried out in accordance with Chapter VI of the General Administrative Code of Georgia.*

67 *Note. The procedure for registration in the Registry of Entrepreneurs and Non-Entrepreneurial (Non-commercial) Legal Entities is determined by the law of Georgia on entrepreneurs. An extract from this registry has the same power as a tax registration certificate.*

68 *Note: The amount of the fee for the permit and its payment to the budget, as well as return of the overpaid amount by the applicant is determined by the law of Georgia on licenses and permit fees.*

69 *Note: Technical documentation should include: General technical name, trade name, use areas, constructive description, functionality, technical characteristics that correspond to the characteristics of similar products on the control list. MSDS (Material Safety Data Sheet) is a safety data sheet of a chemical product that contains information on substances, materials, mixtures, and the name of industrial waste, classification, qualities, treatment, harmfulness, use and transportation.*

70 *Note. An asterisk (*) denotes products classified under the following ECCNs: 0A001,0B001, 0B002, 0B004, 0C001, 0C002, 0C003, 1A007, 1A008c, 1A008d, 1A226, 1B226, 1B227, 1B229, 1B231, 1B233a, 1B233b.1, 1B233b.4., 1C004, 1C012, 1C225, 1C233, 1C235, 1C236, 1C237, 1C239, 1C350.40, 1C350.45, 6A008, 6B008, 6B108, 7A106, 9A104, 9B001. The dual-use items are marked with two asterisks (**) if they are exported, imported, transited, subjected to the brokering services or technical assistance in the country or from the country subject to the sanctions/embargoes by the UNSCRs.*

71 *Note. When products are returned to the sender, providing an end-user certificate is optional.*

- The relevant license and/or permit specified in the Law of Georgia on licenses and permits, if any[72].

8.2. Documents to be submitted for import

The person requesting permission must submit similar documents to the customs department in the electronic form (in exceptional cases, it is permissible to submit hard copies of documents, if it is technically impossible to submit documents in the electronic form) as documents required in case of export, technical assistance and brokering services, with the exception of the cases, where there is no need in submitting an end-user certificate.

8.3. Documents to be submitted for transit

The carrier requesting permission must submit similar documents to the Customs Department in the electronic form (in exceptional cases, it is permissible to submit hard copies of documents, if it is technically impossible to submit documents in the electronic form) as documents required in case of export, technical assistance and brokering services plus the following:

- Documents confirming the carrier's authority to transport the goods or a certified copy thereof;
- Permits for the export and import of dual-use products issued by the authorized body in exporting and importing countries, or certified copies thereof, if the legislation of exporting and importing countries provides for such permits.

8.4. Validity of permits and exemptions for obtaining permits

The permit shall be valid for the term specified therein. If a permit does not specify a term, it shall be valid for 12 months from the date of its issuance.

In accordance with Paragraph 2 of Article 1 of the law of Georgia on licenses and permits, no permit for dual-use items is required for:

- A ministry of Georgia;
- A public department within a ministry.
- The state institution under the Ministry of Internal Affairs of Georgia, which is a LEPL operating in the field of emergency management - the Agency of State Reserves and Civil Security Services.

In accordance with the law of Georgia on the control of military and dual-use goods, there are partial exemptions from the obligation to obtain permits for:
Note: If dual-use items are marked with one (*) and/or two (**) asterisks on the control list, persons released from the obligation to obtain permits should conduct operations based on the

[72] *Note: The following documents may be required in addition to the dual-use item permit:*
- *License for nuclear and radiation activities;*
- *General license for the production and manufacture of military products;*
- *General license for repairs (including upgrades and on-site maintenance), licensing activities for specific dangerous pathogens, etc.*

recommendation of the Standing Committee on Military-Technical Issues of the Ministry of Defense of Georgia.

- Diplomatic missions operating in Georgia and diplomats accredited in Georgia, acting within the frames of official diplomatic goals;
- A permit seeker, who exports or imports controlled products for or upon the request of a Georgian state agency;

If dual-use items are marked with one (*) and/or two (**) asterisks on the control list, the permit applicant should first of all contact the Standing Committee on Military-Technical Issues of the Ministry of Defense of Georgia to receive a recommendation and then to the customs department for obtaining permit[73].

8.5. Recommendation of the Standing Committee on Military-Technical Issues of the Ministry of Defense of Georgia[74]

The Standing Committee on Military-Technical Issues operates within the Ministry of Defense and includes representatives of the Ministry of the Interior, the Ministry of Defense, the Ministry of Finance, the State Security Service, and other agencies.

To receive a recommendation, a written application must be submitted to the committee.

The application should include:

a) The name of the committee;
b) Identity or name of the applicant, personal or identification number and address;
c) Requirements;
d) The name of the product and its quantity/volume;
e) The signature of the applicant;
f) List of documents attached to the application;
g) Documentation relating to the information indicated in the application, including the actions determined by the permit;
h) Any other additional document or information needed to make a decision.

The deadline for receiving recommendations should not exceed nine months. The term of the recommendations is 12 months from the date of their entry into force.

The commission should consider the following criteria:

- National and security interests of Georgia;

[73] *Note. In case of violation of this sequence, the established procedure for issuing a permit does not begin, and the application will be sent to the Standing Committee on Military-Technical Issues of the Ministry of Defense of Georgia for consideration.*

[74] *Note. The procedure for obtaining the commission's recommendation is determined by the statute on the Standing Committee on Military-Technical Issues of the Ministry of Defense, approved by Order No 65 of the minister of defense of Georgia.*

- Georgia's international obligations on the non-proliferation of weapons of mass destruction;
- The protection of human rights in the country of destination, as well as the protection of international humanitarian norms by that country;
- The internal situation in the country of destination due to unrest, tensions and armed conflicts;
- Maintenance of peace, security and stability in the region;
- Attitudes of the purchasing country towards terrorism, its non-proliferation obligations and protection of international norms.

Correspondingly, the commission does not give a positive recommendation if the applicant's action contravenes:

- National and Security Interests of Georgia;
- UNSCR on sanctions/embargoes,
- Commitments assumed by Georgia in terms of non-proliferation of WMD (including biological, chemical, toxic and ballistic weapons);
- Prevention of the apparent risk that the goods may be used for domestic repressions (torture and other cruel, inhuman and degrading treatment or punishment, summary or arbitrary executions, disappearances, arbitrary detentions and other major violations of human rights and fundamental freedoms as set forth in relevant international human rights instruments) and/or for substantial infringement of the international humanitarian norms.
- Measures against provoking a conflict or prolonging it or against aggravating the existing tensions or conflicts in the country of final destination.
- Efforts against support for or encouragement of terrorism and international organized crime.

If a dual-use items on the control list is marked with one asterisk (*) or two asterisks (**), the Customs Department issues a permit for the dual-use item upon the recommendation of the Standing Commission on Military-Technical Issues of the Ministry of Defense of Georgia.

A person who has obtained a permit for a dual-use item and who performs actions in accordance with the permit must:

- Notify the licensing authority about any amendments or additions to the documents submitted to obtain the permit;
- Set up an internal control system to ensure compliance with the conditions of the permit by the permit holder;
- Continuously maintain an information database that will, at the request of the licensing authority, provide a report on actions defined by the permit;
- Provide within a reasonable time the licensing authority with information on licensing activities or documents for carrying out licensing activities in accordance with the legislation of Georgia.
- Maintain a register on licensing activities, which is stored for six years. The starting point of this period begins at the end of the calendar year, when the permit expires. At the same time,

primary records should be kept for the same period, even if the relevant legislation sets a shorter period[75].

It is important that the owner of the permit know that a violation of the terms of the permit can lead to the cancellation of the permit, the decision to issue the permit, and the recommendation and can even lead to prosecution.

For example, Articles 214, 235 and 235[1] of The Criminal Code of Georgia provide for punishment for illegal activities related to the non-proliferation of weapons of mass destruction (for details please refer to sub-section 4.6).

[75] *Note: Currently, the internal control system (the same as the Export Control Internal Compliance Program, Chapter XX), the database form and/or the permit register form and/or the rules for its creation are not defined by the legislation of Georgia, and the holder of the permit creates/produces them at his discretion.*

SECTION 9: End User Certificate

9.1. Definition of End-User Certificate

An end-user certificate (Certificate) is one of the most important document in the field of export control and contains information about the end-use of the product, country of destination and end-user. This is a kind of guarantee document for the ultimate use of the product and is an integral part of the application for obtaining permit.

In accordance with the Article 8 of the Government Decree №372 "On Determination of control measures over military and dual use items". "The certificate is a document certifying the end-use purpose of the product as defined by the law, the end-user country and the end user."

When importing products into Georgia, the exporting country, upon request, issues a certificate and verifies the person who is the end user of this product or technology. This may be a government agency or business entity.
The end-user certificate must contain the following information:

- Name of the exporter and his/her identification data;
- Name of the importer and his/her identification data;
- End-user and his/her identification data;
- Product description, quantity and value;
- Field of application of product;
- End user obligations:
    - that this item will not be used to create WMD and their delivery systems;
    - And will not transfer/re-export to a third country without the permission of the authorized authorities of Georgia.

The importer (consignee) and the end user, can be or not the same person. The consignee is the person to whom the goods are delivered, and the end user will use these goods for their intended purpose.

For example: if a Georgian exporter signs a contract for the supply of sodium cyanide to company X in another country, and company X sells sodium cyanide to a gold mining company Y in that country, then the recipient is company X and the end user is company Y.

It is important for the exporter to have information about foreign partners and the end use of the goods involved in the transaction, since he/she must provide this information to the permit issuer when filling out the application.

The end-user certificate may have the form prescribed by Georgian or foreign law:

The form is provided in case of import.

The form is provided in case of export.

9.2. How to avoid problems with the circulation of controlled goods?

Often there are cases when a participant in international trade who carries goods at the customs border or submits a declaration to the customs authority in the customs clearance zone discovers that goods require a permit for dual-use items / or there is a suspicion that the goods may be in the control list.

Troubles begin in such cases:

- Customs procedures are suspended until the goods are identified and / or permit is granted;
- Items are returned; or
- The goods are sealed and sent to the customs terminal.

In the event of unauthorized movement of such goods and subsequent suspension by the customs authority this may lead to a violation of contractual terms, payment of fines, increased transportation costs, sanctions, confiscation and disposal (even transfer of goods to state ownership or destruction).

In order to avoid such adverse consequences, the owner of the goods must strictly observe and comply with the obligations and rules prescribed by law, for which it would be appropriate:

- Identify the goods before concluding an agreement with a trading partner, determine whether the trade object is a dual-use item;
- Classify goods according to coding system (HS);
- Obtain information about a partner. For example: the exporter must make sure that his partner is not included in the UN Security Council sanctions list or that a company associated with suspicious companies and such goods sold by this company will not be used for terrorist or military purposes (see the UN List on the website);
- Be aware whether embargoes / sanctions are applied to the merchant country and that trade with such a country violates the principles of the international conventions and agreements;
- Be aware of Georgia's international obligations (see UN website and section X of this handbook);
- Be aware of the documents and customs procedures required to obtain a permit;
- Be aware of the rules of international freight transportation and more.

SECTION 10: Definition of Internal Compliance Program (ICP)[76]

International experience shows that an efficient national export control system can be implemented only by joint efforts of the state and business society.

The role of the state in the area of control over the circulation of strategic goods is to develop an efficient export control policy and to meet obligations under non-proliferation regimes, which is reflected in the implementation and observance of international agreements and treaties.

The duty of the industry is to pursue the state export control policy. In order to ensure that companies are able to comply with the requirements of national legislation and export control rules regarding the non-proliferation of WMD, it is desirable that they develop and implement so-called internal compliance systems (internal control system, internal compliance program).

The following obligations of the permit holder are specified in Paragraph 3 of Article 14 of the law of Georgia on control of military and dual-use items:

The permit holder shall comply with the permit conditions set forth in the Georgian legislation by:

a) Immediately informing the licensing authority on any changes made to the documents submitted for obtaining the permit;
b) Putting in place an internal control system that ensures compliance with the conditions of the permit;
c) Maintaining an information database that will allow to immediately report on the fulfillment of the permit conditions upon the request of the licensing authority;
d) Facilitating control measures for the licensing authority as set forth by the legislation of Georgia.

Precise explanation of the rules for creating and operating the internal compliance system is not determined by the legislation of Georgia. Therefore, the following explanations and recommendations will do companies good service in developing and implementing their own internal compliance systems.

The Internal Compliance Program (ICP) is a kind of agreement whereby companies guarantee that they will only make legal transactions and observe the regulations adopted by the state and the export policy declared by the company.

The ICP includes a set of procedures and measures to be taken by an organization to ensure compliance with export control rules. Authorized employees must follow the rules before sending

[76] Open sources for ICPs:
https://www.bis.doc.gov/index.php/documents/pdfs/1641-ecp/file
http://exportcontrols.info/key_elements.htm

goods to another country (for example, screening of the buyer and end-user of the product etc.)

There are many models of ICPs. One of the most efficient systems has been developed by the German company Leybold in the early 1990s. This was the period when the German government began to reassess the existing export control system, and ICP created by Leybold is the best example of how the company is responsible for protecting Germany's strict export control requirements, often even at the expense of rejecting profitable transactions[77].

ICP system should include the following main activities:

- Establishment of regular contacts and cooperation with agencies/authorities issuing exporting licenses/permits;
- Continuous receipt of information on changes and updates made to legislative and sub-legal regulations governing export control;
- Centralization of export-related issues and problems;
- Standardization of procedures;
- Provision of advance notice and verification of all orders and requests;
- Creation of a package of consistent and comprehensive documentation on all sensitive export operations; and
- Organization of training for all employees who are directly or indirectly involved in export control.

One of the main objectives of the ICP is to select a partner correctly and prevent suspicious transactions with suspicious companies. For this purpose, it is first and foremost necessary to "familiarize with" and carefully study the buyers of sensitive products. To analyze each potential transaction, the company may use a questionnaire, which may contain the following items to select a partner:

- How transparent is the identity of the buyers or end-users?
- Is there a mediator?
- Are client data included in the list of persons sanctioned by the UN Security Council or the Government and involved in the illegal trade in strategic goods or in a nuclear program of any country?
- Does the client want or not or does he/she intend or not to provide information on the final use of the products to be reviewed;
- Whether the specific products are relevant to the scope of the buyer's business;
- Is the product consistent with the technical development of the destination country?
- What are the types of payment: Is the buyer willing to pay a large amount in cash, and does this correspond to his/her financial capabilities? Or does he/she offer an unusually profitable conditions to the vendor?
- What is the buyer's business experience (for example, company history)?
- Does the client know what products he wants to buy, its parameters and capabilities?

[77] Please see an article on the Leybold ICP at:
http://exportcontrols.info/leybold.html

- Is the product related to the military industry?
- Does the client avoid or vaguely answer the question on whether the product is intended for internal use, export or re-export?
- Have nonproliferation obligations of recipient countries been verified?
- Was it emphasized that products are subject to permit control or intended for military purposes?
- Is the shipping company listed as a recipient or end-user?
- Is the supply chain suspicious?
- Does the buyer require unusual or inappropriate labeling or overloading?
- Does the customer refuse to cooperate (no fixtures, no instructions, no maintenance etc.)[78].

To successfully implement an ECP, internal export control hierarchy needs to first and foremost be created. A group of export control officers must be formed or an authorized employee must be designated (according to the scope of the company or enterprise) with functions that include:

- Evaluation of each specific trade operation (goods, technology, software) so that the export is fully compliant with export control legislation;
- Product identification against control lists;
- Collaboration with government authorities responsible for issuance of permits and enforcement;
- Legal consulting;
- Personnel training or organization of trainings, etc.

In addition,

- A senior official of a company, such as the chief executive officer or president/DG, should always act as an export control officer and be responsible for all export operations;
- None of the products should be sent from the company until all internal compliance procedures are completed with duly signed documents and a permit issued by the state body;
- All employees of the company should be informed on their obligation to pursue the export policy established by the organization. An opinion of each employee and analysis of export operations is of great importance for decision-making on transactions;
- Company employees must regularly attend courses and seminars, and also study not only export control rules, but also technical aspects of the product and its strategic use, the risk of misusing these products, identifying illegal and suspicious transactions, etc.;
- In addition, employees should be well aware of the fact that any misconduct and personal negligence are punishable, and they will be charged for violating these rules;
- The unit/division/department responsible for export control should have constant communication with officials of the relevant state bodies in order to always be informed of any amendments;

[78] The recommendations of the Wassennar Arrangement on the elements of the Internal Compliance System are available at: www.wassenaar.org/app/uploads/2015/06/2-Internal-Compliance-Programmes.pdf
Recommendations and indicators (red flags) for the Export Compliance Program (ECP), which indicate suspicious and illegal transactions, can be found on the website of the Bureau of Export Control and Security of USA:
www.bis.doc.gov/index.php/compliance-training/export-management-compliance/ compliance

- Assessment of the company's internal compliance program should regularly be carried out in order to ensure compliance with policy procedures and high standards;
- If the company has problems with the implementation of the export control policy, it should contact the state export control authorities or other companies to exchange experience;
- A company must create its own internal database about prohibited persons, companies and countries. These databases should include any country and international lists. In addition, the Company must ensure that it does not violate any rules, conventions, treaties or requirements of international organizations regarding the non-proliferation of WMD. To this end, the company must develop a database on the international legal framework governing international trade in dual-use goods.

An internal compliance system should develop procedures for continuous innovations and improvement. The system must be constantly updated and adapted in accordance with government legislation and changes in the company's policy. Unfortunately, despite the existence of a databases of suspicious companies and illegal transactions, as well as numerous databases that support the identification of strategic goods, the private sector and government agencies often do not have access to such databases.

SECTION 11: Market Analysis and Industry Mapping

After independence, Georgia found itself on a very difficult path of state formation. This was a period of intense internal or external processes that had a negative impact on the development of the country's economy. The country's enterprises have almost disappeared, the scientific sphere and the education system were in poor condition, and the country became almost completely dependent on imports.

At present, compared to the agricultural sector, Georgia is currently developing at a slow pace in the fields of mechanical engineering, chemical industry and other fields of science and research.

Therefore, it should be noted that there are only a few enterprises in the country that produce (and/or trade) strategic goods or whose activities are related to dual-use items and technologies, and that the turnover of dual-use items is low compared to developed countries.

The quantitative statistics on permits issued by the Revenue Service over the past three years looks like as follows:

Type of the permit	Quantity of permits issued in 2017-2019		
	2017	2018	01.01.-01.08.2019
Export permit on DUG	187	197	83
Import permit on DUG	12	13	1
Transit permit on DUG	7	5	3
Permit on brokering service	0	0	0
Permit of technical assistance	0	0	0
TOTAL:	206	215	87

The major number of permits is issued on:

The export of sodium cyanide (USD 47 mln.; 24254 tones), explosive substances, electric detonators, detonating cords, boron carbide enriched by boron-10, boric acid (USD 1924904; 193 kg), network devices (USD 1129073);

The import of explosive substances, electric detonators, detonating cords (USD 1108401);

The transit of natural uranium concentrate (795231 kg).

You can find information about Georgian companies whose activities are related to dual-use products / technologies at the following websites:

GEONITRO LTD
http://www.geo-nitro.ge/en/

RUSTAVIS AZOTI LLC
https://rustaviazot.ge/

NATIONAL CENTER OF HIGH TECHNOLOGIES
http://www.geoisotopes.com/ka/bori-ge

RMG GOLD LLC
http://www.richmetalsgroup.com/

NITRO ALTEX LLC
http://nitroaltex.ge/ka/chven-shesakheb

AERO STRUCTURE TECHNOLOGIES CYCLONE JSC
http://www.atccomposite.com/

RICHARD LUGAR RESEARCH CENTER FOR PUBLIC HEALTH
http://ncdc.ge/Pages/User/LetterContent.aspx?ID=2fd8140d-956a-45a0-bc6c-63f9fdd63346

STATE MILITARY SCIENTIFIC-TECHNICAL CENTER "DELTA"
http://www.delta.gov.ge/

At the same time, Georgia's scientific and research institutes are capable of working in a number of sensitive technology areas that may be subject to controls. For example, Georgia's active biotechnology community should be aware of the laws that might govern their work with international partners.

These communities and institutions are systematically improving technical bases, introducing new technologies, expanding production and establishing themselves on the international market.

The introduction of the national export control system and the steady implementation of the country's security commitments have led to the fact that Georgia currently imports unrestricted

state-of-the-art equipment and technology from advanced countries, that plays a major role in chemical and biological fields, research centers, industry, energy, and in general in the economy and the development of the country.

One of the important projects being implemented in collaboration with European advanced research centers is the construction of an educational and experimental research base - the International Institute of Technology, the main component of which will be the particle accelerator, the so-called Collider. However, the institute will also be of some application, including the latest method of scientific research - adrenal cancer therapy.

On November 27, 2019, Georgia became the Presidency of the Council of Europe and will carry out its duties until May 15, 2020. The country has four main priorities for the Presidency of the Council of Europe:

- Human rights and environmental protection;

- Civil engagement in decision-making;

- Child-centered justice and European experience in restorative justice; And

- Strengthening democracy by involving education, culture and youth.

We hope that adherence to democratic principles, the development of intellectual potential and innovative technologies will ensure that Georgia will gain a dignified place in the international community.

Conclusion

We believe that this handbook will inform the reader about the history of the creation of the various export control systems, legal and political instruments for export control, UN sanctions and the effectiveness of these sanctions, about the dangers and challenges of the uncontrolled proliferation of weapons of mass destruction which once again shows how important the control of trade in strategic goods and compliance with the general rules of non-proliferation are.

At the same time, we hope that the information provided in this handbook about the international and national laws, customs procedures, obligations of trade participants, rules for obtaining permits, general knowledge, definitions and explanations of CBRN related dual-use items in the control list and their identification methods, case studies etc. will help everyone who is interested in trading in strategic goods communicate with relevant law enforcement agencies and their business partners so to be fully comply with national and international rules.