

REPUBLIC OF THE PHILIPPINES
HOUSE OF REPRESENTATIVES
Quezon City

SIXTEENTH CONGRESS
First Regular Session

House Bill No. **3206**



Introduced by **MAGDALO Party List Representatives**
Francisco Ashley L. Acedillo and Gary C. Alejano

EXPLANATORY NOTE

The Philippines shares the concern of States around the world on the possible dangers posed by nuclear, radioactive, strategic and/or dual-use goods, materials and/or services should they fall into the wrong hands because they could directly or indirectly threaten our country's and international security. Moreover, the Philippines recognizes that nuclear security, more generally global security against so called weapons of mass destruction (WMD), is a primary responsibility of each country.

The Philippines is committed to the maintenance and strengthening of national and international security. As stated under Article II Section 2 of the Constitution: "*The Philippines renounces war as an instrument of national policy, adopts the generally accepted principles of international law as part of the law of the land and adheres to the policy of peace, equality, justice, freedom, cooperation, and amity with all nations.*"

Further, Section 8 under the same article states that: "*The Philippines, consistent with the national interest, adopts and pursues a policy of freedom from nuclear weapons in its territory.*" The provision of Section 8 is consistent with the position taken by the Philippines to co-sponsor UN Security Resolution 1540, which was adopted unanimously on 28-April-2004¹.

UN Security Resolution 1540 obliges all States to refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery². The resolution also declares that States shall adopt an appropriate effective legislation and establish domestic controls to prevent the proliferation of Weapons of Mass Destruction (WMD) to non-State actors.

While other countries in Asia and the Pacific were able to adopt appropriate legislation which prevents proliferation of WMDs, the Philippines has lagged behind. This bill seeks to establish a sound, legal, regulatory and organizational structure that will address both our need to pursue economic advancement in global trade and the strengthening of our country's internal security.

Without the proper legislation in place that would prevent proliferation of WMDs, we risk the destruction of lives and properties and the security of our country should they fall in the wrong hands. We also risk involving our country in terroristic acts and schemes thru the transfer of materials across our borders.

In view of the foregoing, the immediate passage of this Act is earnestly sought.


FRANCISCO ASHLEY L. ACEDILLO


GARY C. ALEJANO

¹ Information retrieved from <http://www.un.org/News/Press/docs/2004/sc8076.doc.htm> on 08/27/2013.

² UN Security Council Resolution 1540 (2004) discussed at International Arab Banking Summit. Information retrieved from <http://www.un.org/disarmament/update/20130708/> on 08/27/2013.

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AN ACT
REGULATING THE PROLIFERATION OF STRATEGIC AND DUAL-USE GOODS
AND SERVICES, PROVIDING PENALTIES FOR THEIR VIOLATION AND FOR
OTHER PURPOSES

*Be it enacted by the Senate and the House of Representatives of the Philippines in
Congress assembled:*

TITLE I – GENERAL PROVISIONS

SECTION 1. *Short Title.* – This Act shall be known as the “*Strategic Goods and
Services Management Act of 2013.*”

SEC. 2. *Declaration of Principles and Policies.* – It is the policy of the State to be free
from nuclear/radiological, chemical, biological weapons in its territory. This is enshrined in the
Philippines Constitution and embodied in the Philippine support to United Nations Security
Council Resolution Nos. 1540, 1673, 1810, and 1874 which call on all member states to “take
appropriate and effective action against any threat to international peace caused by the
proliferation of strategic goods and items and their means of delivery, and to implement them
fully in order to promote international security.”

The State shall allow the exchange or trade of chemical, biological and nuclear/
radiological commodities for commercial, agricultural, research, pharmaceutical, medical,
military, and other purposes because it serves the economic interest of the Philippines. However,
the State shall ensure that these economic trade exchanges are not used to develop weapons that

1 can cause large-scale destruction, do not contribute to the build-up or enhancement of terroristic
2 capabilities, nor shall they be diverted to support such capabilities.

3 The State also recognizes the growing global concerns on the need to control worldwide
4 movement of a wide range of military and commercial goods, items, equipment and technologies
5 related to the build-up of weapons, arms and munitions by enemies of the global community. As
6 such, it shall establish and provide for an effective national export, import, transit, transshipment
7 and re-export control law, without having to sacrifice national economic and trade interests and
8 national defense.

9
10 Sec. 3. *Scope and Coverage.* – Subject to the provisions of existing treaties which the
11 Philippines is a signatory to, and to any contrary provision of law of preferential application, this
12 Act shall apply to: (1) any person, whether natural or juridical, engaged in trade of strategic and
13 dual-use goods, items, technologies, equipment and services and operating within the territorial
14 domain, interior waters, maritime zone and airspace of the Philippines, including designated free
15 trade zones; and (2) individual persons who, although physically outside the territorial limits of
16 the Philippines, commit, conspire or plot to commit any of the crimes defined and punished in
17 this Act inside the territorial limits of the Philippines.

18 Without impeding the normal course of trade activities, provisions of this Act shall
19 involve only the regulation of import, export, re-export, transit and transshipment of sensitive
20 goods, services and technology that will, or may assist a program that may have destabilizing
21 potential to internal and international security. These goods, services and technology refer to
22 strategic goods and dual-use goods, items, technologies, equipment and services herein defined
23 as regulated items and listed under the National Control List.

24
25 Sec. 4. *The National Control List.* – It is hereby established the *National Control List*
26 (*Annex 1*) which shall refer to a list of goods, items and technologies subject to licensing under
27 this Act. It shall be issued by the Strategic and Dual-Use Goods and Items Control Council
28 herein constituted and shall describe with specificity the items subject to export, transshipment,

import, transit and re-export control, reasons for the control, and the import/export license requirements applicable to each item.

The Council shall publish the Control List and all the license requirements, policies and procedures within six (6) months from the effectivity of this Act. It shall harmonize commodity classification design for use by exporters, importers, custom brokers, freight forwarders and other stakeholders when providing export/import declaration to the Bureau of Customs.

To enable information on traded goods to be compared internationally, it shall include goods listed under International Conventions as adopted by the Philippine Government such as the Chemical Weapons Convention, Biological and Toxin Weapons Convention, Nuclear Non-Proliferation Treaty, among others. The Council shall, likewise, review the entire list at least once every two (2) years, and shall revise or update the Control List, as appropriate.

Sec. 5. *Definition of Terms.* – For purposes of this Act, the following terms shall mean:

a. *Brokering Activities* refer to forwarding, servicing or financing export transactions through intermediaries who negotiate commercial and logistical arrangements to meet the requirements of buyers, sellers and other relevant actors and facilitate the transfer of strategic and dual-use items in exchange for a commission or other material reward, gain or consideration;

b. *Conveyance* refers to any vessel, train, vehicle, aircraft or other modes of transportation;

c. *Device* refers to any tangible medium wherein information, visual images, sound or other data is, or recorded, stored, or embodied in any form so as to be capable of being retrieved or produced with or without the aid of any equipment;

d. *Document* refers to any records on paper, or in electronic form, kept on any magnetic, optical, chemical or other medium; including photograph map, plan, graph, picture or drawing or device;

e. *Dual-Use Goods and Items* refer to civilian or military goods or items capable of being used for non-military purposes that, when put together or assembled, may assist in the development, production, acquisition or stockpiling of weapons capable of causing mass destruction;

- 1 f. *Export* refers to the shipment or transmission by any means of a strategic or dual-
- 2 use goods, items, and services from the territory of the Philippines to a foreign country;
- 3 g. *Exporter* refers to any natural or juridical person who ships or transmits a
- 4 strategic or dual-use goods and items, and services from the territory of the Philippines to a
- 5 foreign country;
- 6 h. *Import* refers to the shipment or transmission by any means of strategic and dual-
- 7 use goods, items and services from a foreign country into the territory of the Philippines;
- 8 i. *Importer* refers to any natural or juridical person who ships nor transmits a
- 9 strategic or dual-use goods, items and services from a foreign country to the territory of the
- 10 Philippines.
- 11 j. *License or Permit* refers to a written authorization issued by the Government for
- 12 the import, export, re-export, transit or transshipment of any strategic or dual-use goods, items
- 13 and service into, out of, or through the territory of the Philippines. It also includes the provision
- 14 of services pertinent to the trade of strategic and dual-use goods, technology and equipment;
- 15 k. *Military Goods or Munition Items* refer to goods, solely or predominantly
- 16 designed or modified for military purposes. It includes entire products as well as specifically-
- 17 designed parts, accessories, components and technology such as firearms, warships, lasers
- 18 designed for military application, biological agents and sophisticated night-vision equipment;
- 19 l. *Premises* refer to any land, place or building, whether open or enclosed, and
- 20 whether built on or not, including and free trade zones within the territory of the Philippines;
- 21 m. *Re-export or Re-transfer* refers to any shipment, transmission or release by any
- 22 means of any strategic or dual-use goods and items from one foreign country to another. It may
- 23 also include a transfer of an exported item to a new end-user within the recipient country;
- 24 n. *Registration* refers to an application for registration to carry out an act such as to
- 25 arrange, negotiate or do any act to facilitate the arrangement or negotiation of a contract for the
- 26 acquisition or disposal of strategic or dual-use goods and items, technology, equipment and
- 27 services.
- 28 o. *Services* refer to, without limiting the generality of the expression, any reference
- 29 to doing anything, such as supplying or exporting goods that confer a benefit on, grants a right or

1 privilege to, provides a facility for, or otherwise assists someone, including work of a
2 professional nature, with or without the supply or export of goods, or a contract, for and in
3 relation to the lending of money or other provision of financial assistance;

4 p. *Software* refers to a collection of one or more programs or micro programs
5 recorded, stored or embodied in a device;

6 q. *Strategic Goods and Items and Services* refers to any military or non-military
7 goods, service or technology that require special control in the interest of national security and
8 foreign policy. It includes chemical, biological, radiological/nuclear goods and items that can be
9 used in the development, production, operation, use, maintenance, stockpiling, detection,
10 identification or dissemination of chemical, biological, radiological/ nuclear weapons, or their
11 delivery system;

12 r. *Technology* refers to specific knowledge and information, including information
13 in such documents or software as specification, blueprints, plans, manuals, models, diagrams,
14 formulae, tables and design, that is necessary for the development, production or use of any
15 strategic or dual-use goods, items and services;

16 s. *“Through bill of lading” or “Through air way bill”* refers to a bill of lading , air
17 waybill and manifest, respectively, for the consignment of dual-use goods from a place outside
18 the Philippines to a destination which is also outside the Philippines, and without a consignee in
19 the Philippines;

20 t. *Transit* refers to the import into, and subsequent export from, the territory of the
21 Philippines of a strategic or dual-use item that does not enter the commerce of the Philippines but
22 is consigned on a *“through bill lading”* or *“through air way bill”* from a location outside the
23 territory of the Philippines to another location outside the territory of the Philippines, such that
24 the item remains at all times in or on the vessel on which it is imported in the Philippines;

25 u. *Transshipment* refers to the import into, and subsequent export from, the territory
26 of the Philippines, of a strategic or dual-use item that does not enter the commerce of the
27 Philippines but is consigned on a *“through bill lading”, a “through air way bill”, or “through*
28 *manifest”* from a location outside the territory of the Philippines to another location outside the
29 territory of the Philippines, and such that the item is removed or is to be removed from the vessel

1 in which it was imported and either returned to the same vessel, or transferred to another vessel
2 before being exported, whether it is to be transferred directly between such vessels or whether it
3 is to be landed in the Philippines after its importation, and stored, or otherwise handled, pending
4 export;

5 v. *Vessel* refers to any ship, aircraft, automobile, truck, train or other means of
6 transporting items imported into or exported from the territory of the Philippines;

7 w. *Weapons of Mass Destruction or "WMD"* refer to weapons that are capable of a
8 high order of destruction and/or being used in such a manner as to create large number of
9 casualties and significant damage to properties during a single event or incident. It can be high
10 explosives or nuclear/ radiological, biological, and chemical weapons;

11 x. *Weapons of Mass Destruction Program* refers to a plan or program for the
12 development, production, acquisition, or stockpiling of nuclear/radiological, biological and
13 chemical weapons, or missiles capable of delivering such weapons.

14 15 TITLE II – IMPLEMENTING AUTHORITIES 16

17 **Sec. 6. *Strategic Goods and Services Management Council.*** – There shall be created a
18 *Strategic Goods and Services Management Council*, hereinafter referred to as the "Council" to
19 serve as the governing and policy-making body for the formulation, development,
20 implementation, coordination, monitoring and evaluation of policies, programs, plans and
21 activities to the establishment and institutionalization of the strategic and dual-use goods control
22 system.

23 The membership of the Council shall be composed of the representatives of the following
24 agencies:

25 a. Special Envoy of the Office of Special Envoy of Transnational Crime (OSETC),
26 Office of the President, which coordinates, integrates and evaluates the efforts of law
27 enforcement and other government agencies involved in the campaign against transnational
28 crime, and which sets policy directions and program design standards on all matters regarding
29 transnational crime.

b. Department of Trade and Industry (DTI) as represented by the Bureau of Import Services, which facilitates imports, administer import regulation on selected items, and monitor the importation of liberalized and sensitive items.

c. Department of Environment and Natural Resources (DENR) as represented by the Environmental Management Bureau, which implements rules and regulations relating to environmental management, pollution prevention and control, including the licensing and regulation, as provided by law, where applicable, of all natural resources; the regulation and monitoring of service contractors, licensees, lessees, and permittees for the extraction, exploration, development, and utilization of natural resource products; and promulgates policies, rules and regulations for the control of water, air and land pollution.

d. Department of Health (DOH) as represented by the Research Institute For Tropical Medicine, which undertakes research and development activities in the peaceful uses of nuclear energy, institutes regulations on said uses, and carries out the enforcement of said regulations to protect the health and safety of radiation workers and the general public.

e. Department of Finance (DOF) as represented by the Bureau of Customs, which implements effective revenue collections, prevents and suppresses smuggling and entry of prohibited imported goods, supervises and controls the entrance and clearance of vessels and aircrafts engaged in foreign commerce, and enforces the Tariff and Customs Code of the Philippines and all other laws, rules, regulations related to tariff and customs administration.

f. Department of Science and Technology (DOST) as represented by the following:
(1) the Philippine Nuclear Research Institute (PNRI), which undertakes research and development activities in the peaceful uses of nuclear energy and institutes regulations on such uses and carries out the enforcement and the general public; (2) the Advanced Science and Technology Institute, which conducts scientific research and development in the advanced fields of Information and Communications Technology and Microelectronics; and (3) the Industrial Technology Development Institute (ITDI), which plays a critical role in the standardization of various products and materials, and in the maintenance of the accuracy and international traceability of the various units of measurements by providing tests and analytical services needed by government agencies and industries for evaluation, testing and standardization, and

1 establishes and maintains the national physical standards of basic and derived quantities (e.g.
2 mass, volume).

3 g. Department of National Defense (DND) as represented by the Office of
4 Government Arsenal, which is the center for the development of production capabilities to
5 enhance the country's self-sufficiency in defense requirements and which is utilized in the
6 production of basic weapons, ammunition and other munitions for the use of the AFP and the
7 PNP, and for the sale and export of products in excess of AFP and PNP requirements.

8 h. Department of Interior and Local Government (DILG), as represented by the
9 Philippine National Police, which issues permits and licenses for the purchase and manufacture/
10 dealing in of firearms, explosives, ammunition, munitions and other incendiary devices, and;

11 i. Department of Foreign Affairs (DFA) as represented by the Office of the United
12 Nations and Other International Organizations, which is the government's prime agency
13 responsible for the pursuit of the State's foreign policy and who is committed to secure a world
14 free from serious environmental degradation, transnational crime and proliferation of nuclear
15 weapons.

16 For purposes of this Act, the Office of the Special Envoy on Transnational Crime shall
17 serve as the regulatory agency in the trade of strategic goods and services.

18 To ensure a smooth transition to the Council, the incumbent Special Envoy of the Office
19 of the Special Envoy on Transnational Crime (OSETC) shall be designated as the Chairman of
20 the Council for a fixed term of four (4) years. Thereafter, the succeeding Chairman shall be
21 designated by members of the Council from among themselves and shall have a fixed term of
22 four (4) years unless removed for cause.

23 The Vice-Chairman shall, likewise, be elected by the members of the Council from
24 among themselves.

25
26 **Sec. 7. Powers and Functions of the Council.** – Aside from the existing regulatory
27 licensing functions performed by the members of the Council in their respective departments/
28 bureaus/ agencies, they shall have the following powers and functions:

29 a. Formulate strategies and policies for the effective implementation of this Act;

b. Coordinate, implement, monitor and evaluate policies and measures, programs, plans and activities that will establish the country's Strategic Goods Control System;

c. Call on the Philippine National Police (PNP) and other law enforcement agencies of the government for assistance in the form of personnel, facilities and other resources as the need arises in the discharge of its functions;

d. Call on the appropriate enforcement agency to conduct investigation, initiate court action, or in any manner proceed against any person, corporation, or firms who willfully violates, attempts to violate or conspires to violate any provisions of this Act;

e. Create specific working groups by enlisting the assistance and support of government agencies, bureaus, boards, instrumentalities of government-owned or controlled corporations, firms, associations or persons to carry out its functions, including the use of its personnel, facilities and resources for research, developmental and promotional activities necessary in support of the provisions of this Act;

f. Formulate policies and recommendations, regulate programs and advise government agencies and private organizations engaged or involved in activities allied to or affecting the country's importation, exportation and re-exporting, transiting and transshipping such as forwarding, brokering, shipping, insurance, warehousing, financing, and recommend measures that will enhance effective monitoring of strategic or dual-use goods, items and services;

g. Develop common end-users' certification standards in strategic or dual-use goods and items control for purposes of transparency and accountability;

h. Maintain, update and publish the National Control List, in coordination with appropriate regulatory agencies;

i. Strengthen capability-building through technical assistance and training on various measures to detect, monitor, investigate and seize inadvertent or illicit import, export, re-export, transit, transshipment of strategic goods and items;

j. Identify stakeholders both from the public and private sector, particularly business and other civil entities, and define their roles and responsibilities in the Strategic and Dual-Use Goods Control System;

1 k. Strengthen and enhance bilateral and multilateral cooperation and recommend
2 amendments, as appropriate, to existing agreements where the State signatories are the point of
3 origin, destinations or transit of strategic goods and items;

4 l. Formulate and implement policy recommendations to maintain the confidentiality
5 of the disclosure of information, unless and until it meets the national security or foreign policy
6 interests of the country, and;

7 m. Perform such other powers and functions necessary to effectively carry out the
8 provisions of the Act.

9
10 **Sec. 8. *Meetings and Quorum.*** – The Council shall meet at least once every quarter, but
11 may be convened by its Chairman to such special meetings as may be necessary. The members
12 of the Council shall be duly notified of any meeting in advance. The first meeting of the Council
13 shall take place within one (1) month from the effectivity of this Act, at a time and place to be
14 designated by the Chairman.

15 All meetings shall only be convened with a quorum of simple majority of the regular
16 Council members. All meetings without the said quorum shall be deemed null and void.

17
18 **Sec. 9. *Secretariat.*** – The Council shall have the Office of the Special Envoy on
19 Transnational Crime (OSETC) of the Office of the President of the Philippines as the principal
20 secretariat to provide administrative support and technical assistance to the Council. It shall be
21 assisted by personnel from the member-agencies to effectively carry out the functions of the
22 Council. The Secretariat shall be headed by an Executive Director who shall be appointed by the
23 President, upon the recommendation of the Council, and serve as its Chief Operating Officer.

24 The OSETC, as an oversight body on transnational crime, shall coordinate the overall
25 policies and programs of the Council, and shall oversee its operations and administration.

26
27 **TITLE III – RESPONSIBILITIES AND RESTRICTIONS OF PARTIES IN STRATEGIC**
28 **TRADE TRANSACTIONS**

1 **Sec. 10. Responsibilities of Traders.** – Any person who intends to export, import, transit,
2 transship or re-export a strategic goods and services, herein defined, shall be required to obtain a
3 license from the appropriate regulatory agency as provided in Section 14 of this Act. No person
4 shall be allowed to place any strategic goods and items on any vessel located within the
5 territorial and exclusive economic jurisdiction of the Philippines without the consent of the
6 owner or operator.

7
8 **Sec. 11. Responsibilities of Owners and Operators of Vessels.** - Owners and operators
9 of a vessel shall be prohibited from releasing any strategic goods and items within the territory of
10 the Philippines unless the person to whom an import license has been issued presents a license to
11 such owner or operator. The owner or operator of a vessel shall submit to the Bureau of Customs
12 and other duly designated offices, a duly certified copy of the license and a copy of the extract of
13 the manifest of the vessel in or on which the strategic goods and items arrived.

14 All strategic goods and items which are imported, exported, transited, transshipped or re-
15 exported shall be recorded in a manifest which shall contain such particulars as the Implementing
16 Rules and Regulations (IRR) as this Act may prescribe.

17 The owner or operator of a vessel, on entering or leaving the territory of the Philippines
18 shall:

19 a. Furnish the Bureau of Customs a manifest identifying any strategic goods and
20 items being imported or exported in the vessel;

21 b. Allow any duly authorized member of the Bureau of Customs to board a vessel,
22 inspect the cargo for strategic goods and items and search the vessel for strategic goods and
23 items, and;

24 c. Furnish a written list of every port or place at which such vessel has called during
25 the period of three (3) months immediately preceding arrival in Philippine territory.

26
27 **Sec. 12. Responsibilities of Persons Engaged in Brokering Activities.** – No person
28 subject to this Act may engage in brokering activities without a license, including brokering

activities involving strategic goods and items as herein defined, even if the same is not transited or transshipped through, or exported from the territory of the Philippines.

Sec. 13. Responsibilities of Parties. – It shall be the responsibility of any person subject to this Act to verify whether an item falls under the National Control List and subject to regulations. Where any unit or individual knows or should know that the goods and items, technologies and equipment to be exported or imported will be used by the receiving party for the purpose of putting together a WMD or WMD program, it shall not export or import such goods and items, technologies and equipment whether included in the National Control List or not, unless appropriate licenses are obtained.

Sec. 14. Registration and Issuance of Permits and Licenses. – Anyone who intends to engage in the trade of strategic goods and items shall register directly with the appropriate regulatory agencies. Dual-use goods and items that are not normally covered under any regulatory agency shall be elevated to the Council, upon recommendation of its members for determination of the appropriate regulatory agency. The trader shall then file for a license application to be accomplished in such a prescribed manner and form and accompanied by such fees as may be prescribed under the implementing rules and regulations of this Act.

The regulatory agency, likewise, shall grant permit or license to an applicant within a reasonable period of time so as not to impede regular flow of trade, subject to conditions it may deem fit and may renew a license with or without conditions.

The Council may, upon recommendation of the involved regulatory agency of the government, temporarily decide to exercise export control on specific dual-use goods and items and related equipment and technologies other than those listed in the National Control List, if deemed necessary, under the following circumstances:

- a. Customer comes from countries engaged in proliferation and listed as “troubled countries” (*Annex 2*);
- b. Customer is reluctant to offer information about end-use of the good or item;
- c. Customer is willing to pay cash for expensive items;

- d. If there is reason to believe that the information or documentation provided by the customer related to the transaction is false;
- e. Shipping route is abnormal for destination;
- f. Product capabilities do not fit the buyer's line of business, and;
- g. Technical level of company is inconsistent with the commodity being traded.

Sec. 15. Breach of Conditions of Registration, License or Permit. – Any person who holds a permit or is registered to engage in trade of strategic goods and items and who contravenes a condition of the permit or license or registration prescribed under the IRR of this Act shall be held liable and shall suffer the penalty as prescribed in Section 25 of this Act.

Anyone who undertakes trade of strategic goods and items, technologies, equipment and services without being licensed, or trade beyond the scope of the license granted without authorization shall be investigated for criminal liability in accordance with the relevant provisions of existing laws on the crime of smuggling, illegal business operations, or such other crimes. If such crimes are not serious enough for criminal punishment by distinguishing different circumstances, they shall be punished in accordance with applicable provisions of the Customs Law, or be given a warning, or have their goods confiscated, and be fined according to relevant provisions of the Philippine Trade Laws. The appropriate regulatory agency may concurrently revoke the license for their foreign trade operations.

Where the receiving party contravenes the guarantees made according to the conditions, permit or license granted, or there is a risk of proliferation of dual-use restricted goods, items, technologies and equipment, the Council, thru the appropriate regulatory agency, shall suspend or revoke the license or permit initially granted, and immediately notify the Bureau of Customs of such suspension or revocation of license or permit.

Sec. 16. Other Restrictions. – A license holder who intends to change the original declaration of end-use of the strategic goods and items, technologies and equipment as previously declared shall surrender the original license and must file an application for a new license subject to the provisions of this Act.

Any person who forge, buy or sell license for the conduct of trade transactions on strategic goods and items, technologies and equipment shall be held liable for criminal liability in accordance with existing laws on the crime of illegal business operations, of the crime of forging, altering, buying or selling of official documents, certificates or seal of State functionaries. If such act is not serious enough for criminal punishment, they shall be punished in accordance with relevant provisions of the Customs Law, and the appropriate regulatory agency may concurrently revoke the license for foreign trade operations.

When the license for the trade of strategic goods and items, technologies and equipment is obtained by fraud or other illegal means, the appropriate regulatory agency shall impose the following penalties:

a. For the first offense –

Confiscation of subject illegal goods and imposition of a fine.

b. For the second offense –

Suspension or revocation of the license for their foreign trade operations for a period of not less than six (6) months but not more than one (1) year.

c. For the third offense –

Revocation or cancellation of license.

Sec. 17. Liability of Bureaus/Agencies. – Agencies/Bureaus in charge of controlling and regulating the trade of strategic goods, items, technologies and equipment who abuse their powers, neglect their duties or extort or accept money or bribe by taking advantage of their positions, shall be investigated for criminal and administrative liability in accordance with existing criminal and administrative laws.

Sec. 18. Documents and Records-Keeping Requirements. – As provided in Section 14 of this Act, the following documentary requirements shall be complied with when applying for a license or permit:

a. Identification of the applicant's legal representative, manager and the person handling the deal;

- b. Duplicates of contract agreement and other certification documents;
- c. Technical specification of the strategic goods, items, technologies and equipment;
- d. Certificate of end-user and declaration of end-use;
- e. Documents of guarantee from the receiving party that such strategic goods, items, technologies and equipment subject of such transaction will:
 - i. Not be used for the development, production, acquisition or stockpiling of nuclear/ radiological, biological and chemical weapons or missiles capable of delivering such weapons;
 - ii. Not to be used for purposes other than the declared end-use without the consent of authorized Philippine regulatory agencies, and;
 - iii. Not to be transferred to any third party other than the declared end-user without the consent of authorized Philippines regulatory agencies.

The Bureau of Customs shall be provided with copies of all documentations mentioned.

Sec. 19. *Obligations of Applicants.* – Any person subject to the requirements of this Act shall keep a record of the transit, transshipment or re-export of strategic goods, items, technologies and equipment and all other information that may be required by the regulations for a period of five (5) years.

Any person who, in connection with an application for permit or license or registration, or being required to give any information or document to an authorized officer: (a) gives any information that is false or misleading in a material particular, or; (b) gives any documents which gives a statement or omits any matter which renders the document false or misleading in a material particular shall be liable to the penalty prescribed in Section 25 of this Act.

Sec. 20. *Confidentiality of Business Proprietary Information.* – No information obtained as part of the license application may be disclosed to any non-government agency unless such disclosure is in the national security or foreign policy interest of the Philippines or the same may facilitate progress of pending investigations.

1 **Sec. 21. *Obstruction of Authorized Enforcement Officer.*** – It shall be unlawful for any
2 person who, without lawful excuse, commits the following acts:

3 a. Refuse an authorized officer or person acting in his assistance, access to any
4 conveyance or premises which the authorized officer is entitled under this Act;

5 b. Obstructs or hinders an authorized officer in the execution of any powers
6 conferred upon the authorized officer, and;

7 c. Refuses to provide reasonable assistance to an authorized officer in the execution
8 of any powers conferred upon him in this Act.

9
10 **Sec. 22. *Special Courts.*** – To ensure the effective adjudication of controversies under this
11 Act and other trade competition laws, the Supreme Court shall designate such Regional Trial
12 Courts that will have exclusive jurisdiction over violations of this Act. The trial of the case under
13 this Act shall be decided by the court not later than sixty (60) days from the date of the filing of
14 the information. Decision on said cases shall be rendered within the period of fifteen (15) days
15 from the date of submission of the case for resolution.

16
17 **Sec. 23. *Special Prosecutor.*** – Within thirty (30) days from the date of the effectivity of
18 this Act, the Department of Justice (DOJ) shall designate a special prosecutor to exclusively
19 handle cases in violation of this Act. The special prosecutor shall coordinate with the Council in
20 the performance of its duties and functions.

21 The Council may appoint a private prosecutor on a case-to-case basis to assist the special
22 prosecutor in the enforcement of this Act.

23
24 **Sec. 24. *Prosecution of Cases.*** – The preliminary investigation of cases filed under this
25 Act shall be terminated within a period of thirty (30) days from the date of filing.

26 When the preliminary investigation is conducted by a special prosecutor and a probable
27 cause is established, the corresponding information shall be filed in court within twenty-four (24)
28 hours from the termination of the investigation. If the preliminary investigation is conducted by a

1 judge and a probable cause is found to exist, the corresponding information shall be filed by the
2 special prosecutor within forty-eight (48) hours from the date of receipt of record.

3
4 **Sec. 25. Penalties. –**

5 a. Any person who shall violate the provisions of Sections 10, 11, 12, and 13 of this
6 Act and not be covered by the Probation Law shall, upon conviction, suffer the penalty of
7 imprisonment of not less than six (6) months but not more than six (6) years or a fine of not less
8 than One Hundred Thousand Pesos (P100,000.00) but not more than Five Hundred Thousand
9 Pesos (P500,000.00) or both, at the discretion of the Court;

10 b. Any person who shall breach the conditions of registration, license or permit as
11 provided in Section 15 of this Act shall, upon conviction, suffer the penalty of imprisonment of
12 not less than two (2) years but not more than six (6) years or a fine of not less than Three
13 Hundred Thousand Pesos (P300,000.00) but not more than Five Hundred Thousand Pesos
14 (P500,000.00) or both, at the discretion of the Court;

15 c. Any person who shall give false or misleading information in the application for
16 permit, license or registration as provided in Section 19 of this Act shall, upon conviction, suffer
17 the penalty of imprisonment of not less than Four (4) years but not more than six (6) years or fine
18 of not less than One Hundred Thousand Pesos (P100,000.00) but not more than Three Hundred
19 Thousand Pesos (P300,000.00) or both, at the discretion of the Court;

20 d. Any person who shall violate the confidentiality of business proprietary
21 information as provided in Section 20 of this Act shall, upon conviction, suffer the penalty of
22 imprisonment of not less than six (6) months but not more than one (1) year or a fine of not less
23 than Fifty Thousand Pesos (P50,000.00) but not more than One Hundred Thousand Pesos
24 (P100,000.00) or both, at the discretion of the Court, and;

25 e. Any person who shall commit any of the acts provided in Section 21 of this Act
26 shall, upon conviction, suffer the penalty of imprisonment of not less than six (6) months but not
27 more than one (1) year or a fine not less than Ten Thousand Pesos (P10,000.00) but not more
28 than Fifty Thousand Pesos (P50,000.00), or both.

1 **Sec. 26. *Violation by Corporation, Partnership, Association, and Other Entity.*** –

2 Whenever a corporation, partnership, association, firm or other entity, whether domestic or
3 foreign, shall commit any of the acts declared to be unlawful under this Act, the Chairman of the
4 Board of Directors, the President, the General Manager of the corporation, the general partners
5 of a partnership, and the officers and employees directly responsible therefore, shall be imposed
6 the corresponding penalty of imprisonment provided in Section 25 hereof, with such juridical
7 entity being jointly and severally liable with the offender for the fine imposed therein.

8
9 **Sec. 27. *Violation by Government Officials or Employees.*** – In case the offender is a

10 government official or employee, he or she shall, in addition to the penalties prescribed in
11 Section 25 of this Act, be deemed automatically dismissed from office after due process,
12 forfeiture of benefits provided by law and permanently disqualified from holding any elective or
13 appointive position in the government.

14
15 **Sec. 28. *Alien Violators.*** – If the person violating any provision of this Act is a foreigner,

16 he shall, in addition to the other penalties imposed herein, be deported immediately after service
17 of sentence without need of any further proceedings.

18
19 **Sec. 29. *Administrative Fines.*** – In all cases of violations of this Act, including violations

20 of implementing rules and regulations which have been duly promulgated and published in
21 accordance with Section 30 of this Act and subject to the requirements of due process of law, the
22 Chairman of the Council is hereby authorized to impose a fine of not less than Ten Thousand
23 Pesos (P10,000.00), but not more than Fifty Thousand Pesos (P50,000.00), upon any person or
24 entity found guilty thereof. The administrative fines imposed and collected by the Council shall
25 accrue to a special fund to be administered by the Council exclusively for projects and activities
26 relative to its powers and functions.

27
28 **TITLE IV – FINAL PROVISIONS**
29

1 **Sec. 30. *Implementing Rules and Regulations.*** – Within sixty (60) days after the
2 effectivity of this Act, the Chairman of the constituted Strategic Goods Management Council
3 shall, in consultation with the members of the Council, promulgate such rules and regulations
4 necessary for the effective implementation of this Act. The Council shall specify the functions of
5 each agency on the licensing of dual-use goods and items not covered by any existing regulation.

6
7 **Sec. 31. *Appropriations.*** – The sum of Eighty-Five Million pesos (P85,000,000.00) or so
8 much thereof as may be necessary for the effective implementation of this Act for the initial year
9 shall be appropriated from the National Treasury not otherwise appropriated. Thereafter, such
10 amount as may be necessary for the continuous implementations of this Act shall be included in
11 the Annual General Appropriations Act.

12
13 **Sec. 32. *Suppletory Application.*** – For purposes of this Act, the pertinent provisions of
14 the Revised Penal Code and other applicable laws shall have suppletory application.

15
16 **Sec. 33. *Separability Clause.*** – If any provision or part of this Act is declared invalid or
17 unconstitutional, the remaining parts or provisions not affected shall remain in full force and
18 effect.

19
20 **Sec. 34. *Repealing Clause.*** – All laws, decrees, ordinances, rules and regulations,
21 executive or administrative orders, and other issuances or parts thereof which are inconsistent
22 with this Act, are hereby repealed, amended or modified accordingly.

23
24 **Sec. 35. *Effectivity Clause.*** – This Act shall take effect fifteen (15) days after publication
25 in the Official Gazette or in two (2) national newspapers of general circulation.

Approved,

Annex I. THE NATIONAL CONTROL LIST¹

Definitions

- a. "adapted for use in war" means any modification or selection (e.g., altering purity, shelf life, virulence, dissemination characteristics, or resistance to ultra violet(UV) radiation) designed to increase the effectiveness in producing casualties in humans or animals, degrading equipment or damaging crops or the environment;
- b. "biocatalyst" means enzymes for specific chemical or biochemical reactions and other biological compounds which bind to and accelerate the degradation of chemical warfare (CW) agents;
- c. "biopolymer" means the following biological macromolecules:
 - i. enzymes for specific chemical or biochemical reactions;
 - ii. 'monoclonal antibodies', 'polyclonal antibodies' or 'anti-idiotypic antibodies';
 - iii. specially designed or specially processed 'receptors';

Technical Note:

- 1. *'Monoclonal antibodies' means proteins which bind to a specific antigenic site and are produced by a single clone of cells;*
 - 2. *'Polyclonal antibodies' means a mixture of proteins which bind to a specific antigen and are produced by more than one clone of cells;*
 - 3. *'Anti-idiotypic antibodies' means antibodies which bind to the specific antigen binding sites of other antibodies;*
 - 4. *'Receptors' means biological macromolecular structures capable of binding ligands, the binding of which affects physiological functions.*
- d. "development" means all stages prior to "production" (e.g., design, design research, design analyses, design concepts, assembly and testing of prototypes, pilot production schemes, design data, process of transforming design data into goods or "software", configuration design, integration design, layouts);
 - e. "end-effectors" means grippers, active tooling units(i.e., devices for applying motive power, process energy or sensing to the work piece) and any other tooling that is attached to the base plate on the end of a "robot" manipulator arm;
 - f. "energetic materials" means substances or mixtures that react chemically to release energy required for their intended application; "explosives", "pyrotechnics" and "propellants" are sub-classes of energetic materials;
 - g. "explosive signatures" are features which are characteristic of explosives in any form prior to their initiation, as detected using technology including, but not limited to, ion mobility spectrometry, hemiluminescence, fluorescence, nuclear, acoustic or electromagnetic techniques;
 - h. "explosives" means solid, liquid or gaseous substances or mixtures of substances which, in their application as primary, booster, or main charges in warheads, demolition and other applications, are required to detonate;
 - i. "expression vectors" means carriers(e.g., plasmid or virus) used to introduce genetic material into host cells;
 - j. "first generation image intensifier tubes" mean electrostatically focused tubes, employing input and output fibreoptic or glass face plates, multi-alkali photocathodes(S-20 or S-25), but not microchannel plate amplifiers;
 - k. "fuel cell" means an electrochemical device that converts chemical energy directly into Direct Current (DC)electricity by consuming fuel from an external source;
 - l. "improvised explosive devices" means devices fabricated or intended to be placed in an improvised manner incorporating destructive, lethal, noxious, "pyrotechnic" or

¹ Adapted from the UK Military List.

(https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/184052/strategic-export-control-militarylist20130320.pdf)

- incendiary chemicals designed to destroy, disfigure or harass; they may incorporate military stores, but are normally devised from non-military components;
- m. "laser" means an assembly of components which produce both spatially and temporally coherent light which is amplified by stimulated emission of radiation;
 - n. "lighter-than-air vehicles" means balloons and airships that rely on hot air or on lighter-than-air gases such as helium or hydrogen for their lift;
 - o. "nuclear reactor" means the goods within or attached directly to the reactor vessel, the equipment which controls the level of power in the core, and the components which normally contain, come into direct contact with or control the primary coolant of the reactor core;
 - p. "production" means all production stages (e.g., product engineering, manufacture, integration, assembly(mounting), inspection, testing, quality assurance);
 - q. "propellants" means substances or mixtures that react chemically to produce large volumes of hot gases at controlled rates to perform mechanical work;
 - r. "pyrotechnic(s)" means mixtures of solid or liquid fuels and oxidisers which, when ignited, undergo an energetic chemical reaction at a controlled rate intended to produce specific time delays, or quantities of heat, noise, smoke, visible light or infrared radiation; pyrophorics are a subclass of pyrotechnics, which contain no oxidisers but ignite spontaneously on contact with air;
 - s. "required" as applied to "technology", refers to only that portion of "technology" which is peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics or functions. Such "required" "technology" may be shared by different goods and the intended use of "technology" is irrelevant to whether it is "required";
 - t. "riot control agents" means substances which under the expected conditions of use for riot control purposes, produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure;
 - u. "robot" means a manipulation mechanism, which may be of the continuous path or of the point-to-point variety, may use sensors, and which:
 - i. is multifunctional;
 - ii. is capable of positioning or orienting material, parts, tools or special devices through variable movements in three dimensional space;
 - iii. incorporates three or more closed or open loop servo-devices which may include stepping motors; and
 - iv. has "user-accessible programmability" by means of the teach/playback method or by means of an electronic computer which may be a programmable logic controller, i.e., without mechanical intervention;
 - v. "special gun-mounting" means any fixture designed to mount a gun;
 - w. "superconductive" in relation to materials (e.g., metals, alloys or compounds) means those which can lose all electrical resistance (i.e., which can attain infinite electrical conductivity and carry very large electrical currents without Joule heating); the superconductive state of a material is individually characterised by a 'critical temperature', a critical magnetic field, which is a function of temperature, and a critical current density which is a function of both magnetic field and temperature;
 - x. "technology" means specific 'information' necessary for the "development", "production" or "use" of goods or "software";
 - y. "Unmanned Aerial Vehicle" ("UAV") means any "aircraft" capable of initiating flight and sustaining controlled flight and navigation without any human presence on board;
 - z. "use" means operation, installation (e.g., on-site installation), maintenance, checking, repair, overhaul and refurbishing;
 - aa. "user-accessible programmability" means the facility allowing a user to insert, modify or replace "programmes" by means other than:

- i. A physical change in writing or interconnections; or
- ii. The setting of function controls including entry of parameters.

MILITARY, SECURITY AND PARA-MILITARY GOODS, SOFTWARE AND TECHNOLOGY AND ARMS, AMMUNITION AND RELATED MATERIEL

- ML1** Smooth-bore weapons with a calibre of less than 20 mm, other firearms 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:
- A. Rifles, carbines, revolvers, pistols, machine pistols and machine guns;
 - B. Smooth-bore weapons;
 - C. Weapons using caseless ammunition;
 - D. Silencers, "special gun-mountings", weapon sights, clips and flash suppressers for firearms specified in ML1.A., ML1.B. or ML1.C.
- ML2** Smooth-bore weapons with a calibre of 20 mm or more, other armament or weapons with a calibre greater than 12.7 mm (calibre 0.50 inches), projectors and accessories, as follows, and specially designed components therefor:
- A. Guns, howitzers, cannon, mortars, anti-tank weapons, projectile launchers, military flame throwers, rifles, recoilless rifles, smooth-bore weapons, and signature reduction devices therefor;
 - B. Smoke, gas and "pyrotechnic" projectors or generators, specially designed or modified for military use;
 - C. Weapons sights and weapon sight mounts meeting both the following descriptions:
 - a. specially designed for military use; and
 - b. specially designed for weapons specified in ML2.A.;
 - D. Mountings specially designed for the weapons specified in ML2.A.
- ML3** Ammunition and fuze setting devices, as follows, and specially designed components therefor:
- A. Ammunition for weapons specified in ML1, ML2 or ML12;
 - B. Fuse setting devices specially designed for ammunition specified in ML3.A.
- ML4** Bombs, torpedoes, rockets, missiles, other explosive devices and charges, and related equipment and accessories, as follows, and specially designed components therefor:
- A. Bombs, torpedoes, grenades, smoke canisters, rockets, mines, missiles, depth charges, demolition-charges, demolition-devices, demolition-kits, devices that contain "pyrotechnics", cartridges and simulators (i.e., equipment simulating the characteristics of any of these goods), specially designed for military use;
 - B. Equipment that is both specially designed for military use and specially designed for 'activities' relating to any of the following:
 - a. goods specified in ML4.A.; or
 - b. "improvised explosive devices";
 - C. Aircraft Missile Protection Systems (AMPS).
- ML5** Fire control equipment and related alerting and warning equipment, related systems, test and alignment and countermeasure equipment, as follows, specially designed for military use, and specially designed components and accessories therefor:
- A. Weapon sights, bombing computers, gun laying equipment and weapon control systems;
 - B. Target acquisition, designation, range-finding, surveillance or tracking systems; detection, data fusion, recognition or identification equipment; and sensor integration equipment;
 - C. Countermeasure equipment for goods specified in ML5.A. or ML5.B.;

- D. Field test or alignment equipment, specially designed for goods specified in ML5.A., ML5.B. or ML5.C.

ML6 Ground "vehicles" and components as follows:

- A. Ground "vehicles" and components therefor, specially designed or modified for military use;
- B. Other ground "vehicles" and components, as follows:
- a. All-wheel drive "vehicles" capable of off-road use which have been manufactured or fitted with metallic or non-metallic materials or components to provide ballistic protection to level III or better, other than those in ML6.A.;
 - b. Components meeting both of the following descriptions:
 - i. specially designed for "vehicles" specified in ML6.B.a.; and
 - ii. providing ballistic protection to level III or better.

ML7 Chemical or biological toxic agents, toxic chemicals and mixtures containing such agents or chemicals, "riot control agents", radioactive materials, related equipment, components and materials as follows:

- A. Biological agents or radioactive materials, "adapted for use in war" to produce casualties in humans or animals, degrade equipment or damage crops or the environment;
- B. Chemical warfare (CW) agents including, but not limited to, the following:
- a. CW nerve agents:
 1. O-Alkyl (equal to or less than C10, including cycloalkyl) alkyl (Methyl, Ethyl, n-Propyl or Isopropyl) - phosphonofluoridates, such as: Sarin (GB): O-Isopropyl methylphosphonofluoridate (CAS 107-44-8); and Soman (GD): O-Pinacolyl methylphosphonofluoridate (CAS 96-64-0);
 2. O-Alkyl (equal to or less than C10, including cycloalkyl) N,N-dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphoramidocyanidates, such as: Tabun (GA): O-Ethyl N,N-dimethylphosphoramidocyanidate (CAS 77-81-6);
 3. O-Alkyl (H or equal to or less than C10, including cycloalkyl) S-2-dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl)-aminoethyl alkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphonothiolates and corresponding alkylated and protonated salts, such as: VX: O-Ethyl S-2-diisopropylaminoethyl methyl phosphonothiolate (CAS 50782-69-9);
 - b. CW vesicant agents:
 1. Sulphur mustards, such as:
 - i. 2-Chloroethylchloromethylsulphide (CAS 2625-76-5);
 - ii. Bis(2-chloroethyl) sulphide (CAS 505-60-2);
 - iii. Bis(2-chloroethylthio) methane (CAS 63869-13-6);
 - iv. 1,2-bis (2-chloroethylthio) ethane (CAS 3563-36-8);
 - v. 1,3-bis (2-chloroethylthio) -n-propane (CAS 63905-10-2);
 - vi. 1,4-bis (2-chloroethylthio) -n-butane (CAS 142868-93-7);
 - vii. 1,5-bis (2-chloroethylthio) -n-pentane (CAS 142868-94-8);
 - viii. Bis (2-chloroethylthiomethyl) ether (CAS 63918-90-1);
 - ix. Bis (2-chloroethylthioethyl) ether (CAS 63918-89-8);
 2. Lewisites, such as:
 - i. 2-chlorovinylchloroarsine (CAS 541-25-3);
 - ii. Tris (2-chlorovinyl) arsine (CAS 40334-70-1);
 - iii. Bis (2-chlorovinyl) chloroarsine (CAS 40334-69-8);

3. Nitrogen mustards, such as:
 - i. HN1: bis (2-chloroethyl) ethylamine (CAS 538-07-8);
 - ii. HN2: bis (2-chloroethyl) methylamine (CAS 51-75-2);
 - iii. HN3: tris (2-chloroethyl) amine (CAS 555-77-1);
 - c. CW incapacitating agents, such as:
 1. 3-Quinuclidinyl benzilate (BZ) (CAS 6581-06-2);
 - d. CW defoliants, such as:
 1. Butyl 2-chloro-4-fluorophenoxyacetate (LNF);
 2. 2,4,5-trichlorophenoxyacetic acid (CAS 93-76-5) mixed with 2,4-dichlorophenoxyacetic acid (CAS 94-75-7) (Agent Orange (CAS 39277-47-9));
- C. CW binary precursors and key precursors, as follows, and chemical mixtures containing one or more of these precursors:
- a. Alkyl (Methyl, Ethyl, n-Propyl or Isopropyl) Phosphonyl Difluorides, such as: DF: Methyl Phosphonyldifluoride (CAS 676-99-3);
 - b. O-Alkyl (H or equal to or less than C10, including cycloalkyl) O-2-dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl) aminoethyl alkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphonite and corresponding alkylated and protonated salts, such as: QL: O-Ethyl-2-diisopropylaminoethyl methylphosphonite (CAS 57856-11-8);
 - c. Chlorosarin: O-Isopropyl methylphosphonochloridate (CAS 1445-76-7);
 - d. Chlorosoman: O-Pinacolyl methylphosphonochloridate (CAS 7040-57-5);
- D. "Riot control agents", active constituent chemicals and combinations thereof including:
- a. α -Bromobenzeneacetonitrile, (Bromobenzyl cyanide) (CA) (CAS 5798-79-8);
 - b. [(2-chlorophenyl) methylene] propanedinitrile, (o-Chlorobenzylidenemalononitrile) (CS) (CAS 2698-41-1);
 - c. 2-Chloro-1-phenylethanone, Phenylacetyl chloride (o-chloroacetophenone) (CN) (CAS 532-27-4);
 - d. Dibenz-(b,f)-1,4-oxazepine (CR) (CAS 257-07-8);
 - e. 10-Chloro-5,10-dihydrophenarsazine, (Phenarsazine chloride), (Adamsite), (DM) (CAS 578-94-9);
 - f. N-Nonanoylmorpholine, (MPA) (CAS 5299-64-9);
- E. Equipment specially designed or modified for military use, designed or modified for the dissemination of any of the following, and specially designed components therefor:
- a. Materials or agents specified in ML7.A., ML7.B. or ML7.D.;
 - b. CW agents made up of precursors specified in ML7.C.;
- F. Protective and decontamination goods, specially designed or modified for military use, components and chemical mixtures as follows:
- a. Goods designed or modified for defence against materials specified in ML7.A, ML7.B. or ML7.D. and specially designed components therefor;
 - b. Goods designed or modified for decontamination of goods contaminated with materials specified in ML7.A. or ML7.B. and specially designed components therefor;

- c. Chemical mixtures specially developed or formulated for the decontamination of goods contaminated with materials specified in ML7.A. or ML7.B.;
- G. Goods specially designed or modified for military use, designed or modified for the detection or identification of materials specified in ML7.A., ML7.B. or ML7.D. and specially designed components therefor;
- H. "Biopolymers" specially designed or processed for the detection or identification of CW agents specified in ML7.B., and the cultures of specific cells used to produce them;
- I. "Biocatalysts" for the decontamination or degradation of CW agents, and biological systems therefor, as follows:
 - a. "Biocatalysts" specially designed for the decontamination or degradation of CW agents specified in ML7.B. resulting from directed laboratory selection or genetic manipulation of biological systems;
 - b. Biological systems containing the genetic information specific to the "production" of "biocatalysts" specified in ML7.I.a. as follows:
 - a. "Expression vectors";
 - b. Viruses; or
 - c. Cultures of cells.

ML8 "Energetic materials", and related substances, as follows:

- A. "Explosives", as follows, and 'mixtures' thereof:
 - a. ADNBF (aminodinitrobenzofuroxan or 7-amino-4,6-dinitrobenzofurazane-1-oxide) (CAS 97096-78-1);
 - b. BNCP (cis-bis (5-nitrotetrazolato) tetra amine-cobalt (III) perchlorate) (CAS 117412-28-9);
 - c. CL-14 (diamino dinitrobenzofuroxan or 5,7-diamino-4,6-dinitrobenzofurazane-1-oxide) (CAS 117907-74-1);
 - d. [M4C4b5] 4. CL-20 (HNIW or Hexanitrohexaazaisowurtzitane) (CAS 135285-90-4); clathrates of CL-20;
 - e. CP (2-(5-cyanotetrazolato) penta amine-cobalt (III) perchlorate) (CAS 70247-32-4);
 - f. DADE (1,1-diamino-2,2-dinitroethylene, FOX7) (CAS 145250-81-3);
 - g. DATB (diaminotrinitrobenzene) (CAS 1630-08-6);
 - h. DDFP (1,4-dinitrodifurazanopiperazine);
 - i. DDPO (2,6-diamino-3,5-dinitropyrazine-1-oxide, PZO) (CAS 194486-77-6);
 - j. DIPAM (3,3'-diamino-2,2',4,4',6,6'-hexanitrobiphenyl or dipicramide) (CAS 17215-44-0);
 - k. DNGU (DINGU or dinitroglycoluril) (CAS 55510-04-8);
 - l. Furazans as follows:
 - i. DAAOF (diaminoazoxyfurazan);
 - ii. DAAzF (diaminoazofurazan) (CAS 78644-90-3);
 - m. HMX and derivatives as follows:
 - i. HMX (Cyclotetramethylenetetranitramine, octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazine, 1,3,5,7-tetranitro-1,3,5,7-tetraazacyclooctane, octogen or octogene) (CAS 2691-41-0);
 - ii. difluoroaminated analogs of HMX;
 - iii. K-55 (2,4,6,8-tetranitro-2,4,6,8-tetraazabicyclo-[3,3,0]-octanone-3, tetranitrosemiglycouril or keto-bicyclic HMX) (CAS 130256-72-3);
 - n. HNAD (hexanitroadamantane) (CAS 143850-71-9);
 - o. HNS (hexanitrostilbene) (CAS 20062-22-0);

- p. Imidazoles as follows:
 - i. BNNII (Octahydro-2,5-bis(nitroimino)imidazo [4,5-d]imidazole);
 - ii. DNI (2,4-dinitroimidazole) (CAS 5213-49-0);
 - iii. FDIA (1-fluoro-2,4-dinitroimidazole);
 - iv. NTDNIA (N-(2-nitrotriazolo)-2,4-dinitroimidazole);
 - v. PTIA (1-picryl-2,4,5-trinitroimidazole);
- q. NTNMH (1-(2-nitrotriazolo)-2-dinitromethylene hydrazine);
- r. NTO (ONTA or 3-nitro-1,2,4-triazol-5-one) (CAS 932-64-9);
- s. Polynitrocubanes with more than four nitro groups;
- t. PYX (2,6-bis(picrylamino)-3,5-dinitropyridine) (CAS 38082-89-2);
- u. RDX and derivatives as follows:
 - i. RDX (cyclotrimethylenetrinitramine, cyclonite, T4, hexahydro-1,3,5-trinitro-1,3,5-triazine, 1,3,5-trinitro-1,3,5-triazacyclohexane, hexogen or hexogene) (CAS 121-82-4);
 - ii. Keto-RDX (K-6 or 2,4,6-trinitro-2,4,6-triazacyclohexanone) (CAS 115029-35-1);
- v. TAGN (triaminoguanidinenitrate) (CAS 4000-16-2);
- w. TATB (triaminotrinitrobenzene) (CAS 3058-38-6);
- x. TEDDZ (3,3,7,7-tetrakis(difluoroamine) octahydro-1,5-dinitro-1,5-diazocine);
- y. Tetrazoles as follows:
 - i. NTAT (nitrotriazol aminotetrazole);
 - ii. NTNT (1-N-(2-nitrotriazolo)-4-nitrotetrazole);
- z. Tetryl (trinitrophenylmethylnitramine) (CAS 479-45-8);
- aa. TNAD (1,4,5,8-tetranitro-1,4,5,8-tetraazadecalin) (CAS 135877-16-6);
- bb. TNAZ (1,3,3-trinitroazetidine) (CAS 97645-24-4);
- cc. TNGU (SORGUYL or tetranitroglycoluril) (CAS 55510-03-7);
- dd. TNP (1,4,5,8-tetranitro-pyridazino[4,5-d]pyridazine) (CAS 229176-04-9);
- ee. Triazines as follows:
 - i. DNAM (2-oxy-4,6-dinitroamino-s-triazine) (CAS 19899-80-0);
 - ii. NNHT (2-nitroimino-5-nitro-hexahydro-1,3,5-triazine) (CAS 130400-13-4);
- ff. Triazoles as follows:
 - i. 5-azido-2-nitrotriazole;
 - ii. ADHTDN (4-amino-3,5-dihydrazino-1,2,4-triazole dinitramide) (CAS 1614-08-0);
 - iii. ADNT (1-amino-3,5-dinitro-1,2,4-triazole);
 - iv. BDNTA ([bis-dinitrotriazole]amine);
 - v. DBT (3,3'-dinitro-5,5-bis-1,2,4-triazole) (CAS 30003-46-4);
 - vi. DNBT (dinitrobistriazole) (CAS 70890-46-9);
 - vii. This entry is not used;
 - viii. NTDNT (1-N-(2-nitrotriazolo)-3,5-dinitrotriazole);
 - ix. PDNT (1-picryl-3,5-dinitrotriazole);
 - x. TACOT (tetranitrobenzotriazolobenzotriazole) (CAS 25243-36-1);
- gg. "Explosives" not listed elsewhere in ML8.A. and meeting any of the following descriptions:
 - i. Detonation velocity exceeding 8,700 m/s at maximum density; or
 - ii. Detonation pressure exceeding 34 GPa (340 kbar);
- hh. Organic "explosives" not listed elsewhere in ML8.A. and meeting both of the following descriptions:
 - i. Yielding detonation pressures of 25 GPa (250 kbar) or more; and
 - ii. Remaining stable at temperatures of 523 K (250°C) or higher for periods of 5 minutes or longer;

B. "Propellants" as follows:

- a. Any United Nations (UN) Class 1.1 solid "propellant" with a theoretical specific impulse (under standard conditions) of more than 250 seconds for non-metallised, or more than 270 seconds for aluminised compositions;
- b. Any UN Class 1.3 solid "propellant" with a theoretical specific impulse (under standard conditions) of more than 230 seconds for non-halogenised, 250 seconds for non-metallised compositions and 266 seconds for metallised compositions;
- c. "Propellants" having a force constant of more than 1,200 kJ/kg;
- d. "Propellants" that can sustain a steady-state linear burning rate of more than 38 mm/s under standard conditions (as measured in the form of an inhibited single strand) of 6.89 MPa (68.9 bar) pressure and 294 K (21°C);
- e. Elastomer Modified Cast Double Base (EMCDB) "propellants" with extensibility at maximum stress of more than 5% at 233 K (-40°C);
- f. Any "propellant" containing substances specified in ML8.A.;
- g. "Propellants", not specified elsewhere in this Schedule, specially designed for military use;

C. "Pyrotechnics", fuels and related substances, as follows, and 'mixtures' thereof:

- a. Aircraft fuels specially formulated for military purposes;
- b. Alane (aluminium hydride) (CAS 7784-21-6);
- c. Carboranes; decaborane (CAS 17702-41-9); pentaboranes (CAS 19624-22-7 and 18433-84-6) and their derivatives;
- d. Hydrazine and derivatives as follows (see also ML8.D.h. and ML8.D.i. for oxidising hydrazine derivatives):
 - i. Hydrazine (CAS 302-01-2) in concentrations of 70% or more;
 - ii. Monomethyl hydrazine (CAS 60-34-4);
 - iii. Symmetrical dimethyl hydrazine (CAS 540-73-8);
 - iv. Unsymmetrical dimethyl hydrazine (CAS 57-14-7);
- e. Metal fuels in particle form whether spherical, atomised, spheroidal, flaked or ground, manufactured from material consisting of 99% or more of any of the following:
 - i. Metals as follows and 'mixtures' thereof:
 1. Beryllium (CAS 7440-41-7) in particle sizes of less than 60 µm;
 2. Iron powder (CAS 7439-89-6) with particle size of 3 µm or less produced by reduction of iron oxide with hydrogen;
 - ii. 'Mixtures' containing any of the following:
 1. Zirconium (CAS 7440-67-7), magnesium (CAS 7439-95-4) or alloys of these in particle sizes of less than 60 µm;
 2. Boron (CAS 7440-42-8) or boron carbide (CAS 12069-32-8) fuels of 85% purity or higher and particle sizes of less than 60 µm;
- f. Military materiel containing thickeners for hydrocarbon fuels specially formulated for use in flame throwers or incendiary munitions, such as metal stearates or palmates (e.g., octal (CAS 637-12-7)) and M1, M2 and M3 thickeners;
- g. Perchlorates, chlorates and chromates composited with powdered metal or other high energy fuel components;
- h. Spherical aluminium powder (CAS 7429-90-5) with a particle size of 60 µm or less, manufactured from material with an aluminium content of 99% or more;
- i. Titanium subhydride (TiH_n) of stoichiometry equivalent to $n = 0.65 - 1.68$;

D. Oxidisers, as follows, and 'mixtures' thereof:

- a. ADN (ammonium dinitramide or SR 12) (CAS 140456-78-6);
- b. AP (ammonium perchlorate) (CAS 7790-98-9);
- c. Compounds composed of fluorine and any of the following:
 - i. Other halogens;
 - ii. Oxygen; or
 - iii. Nitrogen;
- d. DNAD (1,3-dinitro-1,3-diazetidine) (CAS 78246-06-7);
- e. HAN (hydroxylammonium nitrate) (CAS 13465-08-2);
- f. HAP (hydroxylammonium perchlorate) (CAS 15588-62-2);
- g. HNF (hydrazinium nitroformate) (CAS 20773-28-8);
- h. Hydrazine nitrate (CAS 37836-27-4);
- i. Hydrazine perchlorate (CAS 27978-54-7);
- j. Liquid oxidisers comprised of or containing inhibited red fuming nitric acid (IRFNA) (CAS 8007-58-7);

E. Binders, plasticisers, monomers and polymers as follows:

- a. AMMO (azidomethylmethyloxetane and its polymers) (CAS 90683-29-7);
- b. BAMO (bisazidomethyloxetane and its polymers) (CAS 17607-20-4);
- c. BDNPA (bis (2,2-dinitropropyl)acetal) (CAS 5108-69-0);
- d. BDNPF (bis (2,2-dinitropropyl)formal) (CAS 5917-61-3);
- e. BTTN (butanetrioltrinitrate) (CAS 6659-60-5);
- f. Energetic monomers, plasticisers or polymers, specially formulated for military use and containing any of the following:
 - i. Nitro groups;
 - ii. Azido groups;
 - iii. Nitrate groups;
 - iv. Nitro groups; or
 - v. Difluoroamino groups;
- g. FAMAO (3-difluoroaminomethyl-3-azidomethyl oxetane) and its polymers;
- h. FEFO (bis-(2-fluoro-2,2-dinitroethyl) formal) (CAS 17003-79-1);
- i. FPF-1 (poly-2,2,3,3,4,4-hexafluoropentane-1,5-diol formal) (CAS 376-90-9);
- j. FPF-3 (poly-2,4,4,5,5,6,6-heptafluoro-2-tri-fluoromethyl-3-oxaheptane-1,7-diol formal);
- k. GAP (glycidylazide polymer) (CAS 143178-24-9) and its derivatives;
- l. HTPB (hydroxyl terminated polybutadiene) with a hydroxyl functionality equal to or greater than 2.2 and less than or equal to 2.4, a hydroxyl value of less than 0.77 meq/g, and a viscosity at 30°C of less than 47 poise (CAS 69102-90-5);
- m. Alcohol functionalised poly(epichlorohydrin) with a molecular weight less than 10,000, as follows:
 - i. Poly(epichlorohydrindiol); and
 - ii. Poly(epichlorohydrintriol);
- n. NENAs (nitroethylnitramine compounds) (CAS 17096-47-8, 85068-73-1, 82486-83-7, 82486-82-6 and 85954-06-9);
- o. PGN (poly-GLYN, polyglycidyl nitrate or poly(nitratomethyl oxirane) (CAS 27814-48-8);
- p. Poly-NIMMO (poly nitratomethylmethyloxetane) or poly-NMMO (poly[3-Nitratomethyl-3-methyloxetane]) (CAS 84051-81-0);
- q. Polynitroorthocarbonates;
- r. TVOPA (1,2,3-tris[1,2-bis(difluoroamino)ethoxy] propane or tris vinox propane adduct) (CAS 53159-39-0);

F. Additives as follows:

- a. Basic copper salicylate (CAS 62320-94-9);

- b. BHEGA (bis-(2-hydroxyethyl) glycolamide) (CAS 17409-41-5);
- c. BNO (butadienenitrileoxide);
- d. Ferrocene derivatives as follows:
 - i. Butacene (CAS 125856-62-4);
 - ii. Catocene (2,2-bis-ethylferrocenyl propane) (CAS 37206-42-1);
 - iii. Ferrocene carboxylic acids including:
 - 1. Ferrocene carboxylic acid (CAS 1271-42-7);
 - 2. 1,1'-Ferrocenedicarboxylic acid (CAS 1293-87-4);
 - 3. Other Ferrocene carboxylic acids;
 - iv. n-butyl-ferrocene (CAS 31904-29-7);
 - v. Other adducted polymer ferrocene derivatives;
- e. Lead beta-resorcyate (CAS 20936-32-7);
- f. Lead citrate (CAS 14450-60-3);
- g. Lead-copper chelates of beta-resorcyate or salicylates (CAS 68411-07-4);
- h. Lead maleate (CAS 19136-34-6);
- i. Lead salicylate (CAS 15748-73-9);
- j. Lead stannate (CAS 12036-31-6);
- k. MAPO (tris-1-(2-methyl)aziridiny phosphine oxide) (CAS 57-39-6), and BOBBA 8(bis(2-methyl aziridiny)-2-(2-hydroxypropanoxy) propylamino phosphine oxide); and other MAPO derivatives;
- l. Methyl BAPO (bis(2-methyl aziridiny) methylamino phosphine oxide) (CAS 85068-72-0);
- m. N-methyl-p-nitroaniline (CAS 100-15-2);
- n. 3-Nitrazo-1,5-pentane diisocyanate (CAS 7406-61-9);
- o. Organo-metallic coupling agents as follows:
 - i. Neopentyl[diallyl]oxy, tri[diethyl]phosphato-titanate (CAS 103850-22-2); also known as titanium IV, 2,2-[bis 2-propenolatomethyl, butanolato, tris (diethyl) phosphato] (CAS 110438-25-0); or LICA 12 (CAS 103850-22-2);
 - ii. Titanium IV, [(2-propenolato-1) methyl, n-propanolatomethyl] butanolato-1, tris[diethyl] pyrophosphate or KR3538;
 - iii. Titanium IV, [(2-propenolato-1) methyl, n-propanolatomethyl] butanolato-1, tris(diethyl)phosphate;
- p. Polycyanodifluoroaminoethyleneoxide;
- q. Polyfunctional aziridine amides with isophthalic, trimesic (BITA or butyleneimine trimesamide), isocyanuric or trimethyladipic backbone structures and 2-methyl or 2-ethyl substitutions on the aziridine ring;
- r. Propyleneimine (2-methylaziridine) (CAS 75-55-8);
- s. Superfine iron oxide (Fe₂O₃) (CAS 1317-60-8) with a specific surface area more than 250 m²/g and an average particle size of 3.0 nm or less;
- t. TEPAN (tetraethylenepentaamineacrylonitrile) (CAS 68412-45-3); cyanoethylated polyamines and their salts;
- u. TEPANOL (tetraethylenepentaamineacrylonitrileglycidol) (CAS 68412-46-4); cyanoethylated polyamines adducted with glycidol and their salts;
- v. TPB (triphenyl bismuth) (CAS 603-33-8);

G. Precursors as follows:

- a. BCMO (bischloromethyloxetane) (CAS 142173-26-0);
- b. Dinitroazetidine-t-butyl salt (CAS 125735-38-8);
- c. HBIW (hexabenzylhexaazaisowurtzitane) (CAS 124782-15-6);
- d. TAIW (tetraacetyldibenzylhexaazaisowurtzitane) (CAS 182763-60-6);
- e. TAT (1,3,5,7-tetraacetyl-1,3,5,7-tetraaza cyclo-octane) (CAS 41378-98-7);
- f. 1,4,5,8-tetraazadecalin (CAS 5409-42-7);
- g. 1,3,5-trichlorobenzene (CAS 108-70-3);

h. 1,2,4-trihydroxybutane (1,2,4-butanetriol) (CAS 3068-00-6).

ML9 "Vessels" of war, special naval equipment, accessories, components and other surface "vessels", as follows:

- A. "Vessels" and components, as follows:
 - a. "Vessels" (surface or underwater) specially designed or modified for military use, regardless of current state of repair or operating condition, and whether or not they contain weapon delivery systems or armour, and components therefor specially designed or modified for military use;
 - b. Surface "vessels", other than those specified in ML9.A.a., having any of the following fixed or integrated into the "vessels":
 - i. Automatic weapons having a calibre of 12.7 mm or greater specified in ML1, or weapons specified in ML2, ML4, ML12 or ML19, or 'mountings' or hard points for such weapons;
 - ii. Fire control systems specified in ML5;
 - c. Both:
 - i. 'CBRN protection'; and
 - ii. 'Pre-wet or wash down system' designed for decontamination purposes;
 - d. Active weapon countermeasure systems specified in ML4.B., ML5.C. or ML11.A. but only where the "vessel" has any of the following:
 - i. 'CBRN protection';
 - ii. Hull and superstructure, specially designed to reduce the radar cross section;
 - iii. Thermal signature reduction devices, (e.g., an exhaust gas cooling system), excluding those specially designed to increase overall power plant efficiency or to reduce the environmental impact; or
 - iv. A degaussing system designed to reduce the magnetic signature of the whole vessel;
- B. Anti-submarine nets and anti-torpedo nets, specially designed for military use;
- C. Hull penetrators and connectors, specially designed for military use, that enable interaction with equipment external to a "vessel", and components therefor specially designed for military use.

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

- A. Manned "aircraft" and "lighter-than-air vehicles", and specially designed components therefor;
- B. This entry is not used;
- C. Unmanned aircraft and related equipment, as follows, and specially designed components therefor:
 - a. "UAVs", Remotely Piloted Air Vehicles (RPVs), autonomous programmable vehicles and unmanned "lighter-than-air vehicles";
 - b. Launchers, recovery equipment and ground support equipment;
 - c. Equipment designed for command or control;
- D. Propulsion aero-engines and specially designed components therefor;
- E. Airborne equipment including airborne refuelling equipment, specially designed for use with "aircraft" specified in ML10.A. or the aero-engines specified in ML10.D. and specially designed components therefor;
- F. Pressure refuellers, pressure refuelling equipment, equipment specially designed to facilitate operations in confined areas and 'ground equipment' specially designed or modified for use with "aircraft" specified in ML10.A. or for aero-engines specified in ML10.D.;

- G. Military crash helmets and protective masks, and specially designed components therefor, pressurised breathing equipment and partial pressure suits for use in "aircraft", anti-g suits, liquid oxygen converters used for "aircraft" or missiles, and catapults and cartridge actuated devices for emergency escape of personnel from "aircraft";
- H. Parachutes, paragliders and related equipment, as follows, and specially designed components therefor:
 - a. Parachutes not specified elsewhere in this Schedule;
 - b. Paragliders;
 - c. Equipment specially designed for high altitude parachutists;
- I. Controlled opening equipment or automatic piloting systems designed for parachuted loads.

ML11 Electronic equipment, not specified elsewhere in this Schedule, as follows, and specially designed components therefor:

- A. Electronic equipment specially designed or modified for military use;
- B. Global Navigation Satellite Systems (GNSS) jamming equipment.

ML12 High Velocity Kinetic Energy Weapon (KEW) systems and related equipment, as follows, and specially designed components therefor:

- A. Kinetic energy weapon systems specially designed for destruction or effecting mission abort of a target;
- B. Specially designed test and evaluation facilities and test models (e.g., diagnostic instrumentation and targets), for dynamic testing of kinetic energy projectiles and systems.

ML13 Armoured or protective goods and constructions, as follows:

- A. Armoured plate, having any of the following characteristics:
 - 1. Manufactured to comply with a military standard or specification; or
 - 2. Suitable for military use;
- B. Constructions of metallic or non-metallic materials or combinations thereof specially designed to provide ballistic protection for military systems;
- C. Helmets manufactured according to military standards or specifications, or comparable national standards, and specially designed components therefor;
- D. Body armour or protective garments, and components therefor, as follows:
 - 1. Soft body armour or protective garments, manufactured to military standards or specifications, or to their equivalents, and specially designed components therefor;
 - 2. Hard body armour plates providing ballistic protection equal to or greater than level III or national equivalents.

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 in ML1 or ML2, and specially designed components and accessories therefor.

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

- A. Recorders and image processing equipment;
- B. Cameras, photographic equipment and film processing equipment;
- C. Image intensifier equipment;
- D. Infrared or thermal imaging equipment;
- E. Imaging radar sensor equipment;
- F. Countermeasure or counter-countermeasure equipment for the equipment specified in ML15.A. to ML15.E.

ML16 Forgings, castings and other unfinished "goods", specially designed for any of the "goods" specified in ML1 to ML4, ML6, ML9, ML10, ML12 or ML19.

ML17 Miscellaneous goods, material and 'libraries', as follows, and specially designed components therefor:

- A. Self-contained diving and underwater swimming apparatus as follows:
 - a. Closed or semi-closed circuit (rebreathing) apparatus specially designed for military use (i.e., specially designed to be non-magnetic);
 - b. Specially designed components for use in the conversion of open-circuit apparatus to military use;
 - c. Goods designed exclusively for military use with self-contained diving and underwater swimming apparatus;
- B. Construction equipment specially designed for military use;
- C. Fittings, coatings and treatments for signature suppression, specially designed for military use;
- D. Field engineer equipment specially designed for use in a combat zone;
- E. "Robots", "robot" controllers and "robot" "end-effectors", meeting any of the following descriptions:
 - 1. Specially designed for military use;
 - 2. Incorporating means of protecting hydraulic lines against externally induced punctures caused by ballistic fragments (e.g., incorporating self-sealing lines) and designed to use hydraulic fluids with flash points higher than 839 K (566°C); or
 - 3. Specially designed or rated for operating in an Electro-Magnetic Pulse (EMP) environment;
- F. 'Libraries' (parametric technical databases) specially designed for military use with equipment specified in this Schedule;
- G. Nuclear power generating equipment or propulsion equipment (e.g., "nuclear reactors"), specially designed for military use and components therefor, specially designed or modified for military use;
- H. Goods and material, coated, treated or prepared to provide signature suppression, specially designed for military use, other than those controlled elsewhere in this Schedule;
- I. Simulators specially designed for military "nuclear reactors";
- J. Mobile repair shops specially designed or modified to service military equipment;
- K. Field generators specially designed or modified for military use;
- L. Containers specially designed or modified for military use;
- M. Ferries, other than those controlled elsewhere in this Schedule, rafts, bridges and pontoons, specially designed for military use;
- N. Test models specially designed for the "development" of goods or "technology" specified in ML4, ML6, ML9 or ML10;
- O. Laser protection equipment (e.g., eye and sensor protection) specially designed for military use;
- P. "Fuel cells", other than those specified elsewhere in this Schedule, specially designed or modified for military use.

ML18 Production equipment and components as follows:

- A. Specially designed or modified production equipment for the "production" of goods specified in this Schedule, and specially designed components therefor;
- B. Specially designed environmental test facilities and specially designed equipment therefor, for the certification, qualification or testing of goods specified in this Schedule.

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

- A. "Laser" systems specially designed for destruction or effecting mission-abort of a target;
- B. Particle beam systems capable of destruction or effecting mission-abort of a target;
- C. High power Radio-Frequency (RF) systems capable of destruction or effecting mission- abort of a target;
- D. Equipment specially designed for the detection or identification of, or defence against, systems specified in ML19.A. to ML19.C.;
- E. Physical test models for the systems, equipment and components specified in ML19;
- F. "Laser" systems specially designed to cause permanent blindness to un-enhanced vision(i.e., to the naked eye or to the eye with corrective eyesight devices).

ML20 Cryogenic and "superconductive" equipment, as follows, and specially designed components and accessories therefor:

- A. Equipment specially designed or configured to be installed in a vehicle for military ground, marine, airborne or space applications, capable of operating while in motion and of producing or maintaining temperatures below 103 K (-170°C);
- B. "Superconductive" electrical equipment (rotating machinery and transformers) specially designed or configured to be installed in a vehicle for military ground, marine, airborne or space applications and capable of operating while in motion.

ML21 "Software" as follows:

- A. "Software" specially designed or modified for the "development", "production" or "use" of equipment, material or "software" specified in this Schedule;
- B. Specific "software", other than that specified in ML21.A., as follows:
 - 1. "Software" that is both specially designed for military use and specially designed for modelling, simulating or evaluating of military weapons systems;
 - 2. "Software" that is both specially designed for military use and specially designed for modelling or simulating military operational scenarios;
 - 3. "Software" for determining the effects of conventional, nuclear, chemical or biological weapons;
 - 4. "Software" that is both specially designed for military use and specially designed for Command, Communications, Control and Intelligence (C3I) applications or Command, Communications, Control, Computer and Intelligence (C4I) applications;
- C. "Software", not specified in ML21.A. or B., specially designed or modified to enable equipment not specified in this Schedule to perform the military functions of equipment specified in this Schedule;
- D. Other "software" specially designed or modified for military use.

Other security and para-military police goods as follows:

- A. Acoustic devices represented by the manufacturers or suppliers thereof as suitable for riot control purposes, and specially designed components therefor;
- B. Anti-riot and ballistic shields and specially designed components therefor;
- C. Shackles designed for restraining human beings having an overall dimension including chain, when measured from the outer edge of one cuff to the outer edge of the other cuff, of between 240mm and 280mm when locked;
- D. Electric-shock belts designed for restraining human beings by the administration of electric shocks having a no-load voltage not exceeding 10 000 volts;
- E. Water cannon and specially designed components therefor;
- F. Riot control vehicles which have been specially designed or modified to be electrified to repel boarders and components therefor specially designed or modified for that purpose;
- G. Electric-shock dart guns having a no-load voltage not exceeding 10,000 volts;

- H. Components specially designed or modified for portable devices designed or modified for the purposes of riot control or self-protection by the administration of an electric shock (e.g., electric-shock batons, electric-shock shields, stun-guns and electric-shock dart-guns).

ML22 "Technology" as follows:

- A. "Technology", other than "technology" specified in ML22.B., which is "required" for the "development", "production" or "use" of goods or "software" specified in this Schedule;
- B. "Technology" as follows:
- a. "Technology" "required" for the design of, the assembly of components into, and the operation, maintenance and repair of complete production installations for goods specified in this Schedule, even if the components of such production installations are not specified;
 - b. "Technology" "required" for the "development", "production" or "use" of toxicological agents, related equipment or components specified in ML7.a. to ML7.G.;
 - c. "Technology" "required" for the "development", "production" or "use" of "biopolymers" or cultures of specific cells specified in ML7.H.;
 - d. "Technology" "required" exclusively for the incorporation of "biocatalysts", specified in ML7.I.a., into military carrier substances or military materiel.

Annex 2. LIST OF TROUBLED COUNTRIES

No.	Country or Region	Company or Organization	Also Known As	Type of WMD
1	India	Aeronautical Development Establishment(ADE), Defence Research and Development Organisation (DRDO)		M
2	India	Bhabha Atomic Research Centre (BARC),Department of Atomic Energy (DAE)		N
3	India	DAE Thal Heavy Water Board (HWB)facility		N
4	India	Defence Metallurgical Research Laboratory(DMRL), DRDO		M, N
5	India	Defence Research and Development Laboratory (DRDL), DRDO		M, N
6	India	Directorate of Purchase and Stores, DAE		N
7	India	Hindustan Aeronautics Ltd. (HAL)		M
8	India	Indira Gandhi Centre for Atomic Research(IGCAR), DAE		N
9	India	Research Centre Imarat (RCI), DRDO		M
10	India	Vikram Sarabhai Space Centre (VSSC),ISRO		M
11	Islamic Republic of Afghanistan	Al Qa'ida/Islamic Army	•The Base •Al Qaeda •Islamic Salvation Foundation •The Group for the Preservation of the Holy Sites •The Islamic Army for the Liberation of Holy Places •The World Islamic Front for Jihad against Jews and Crusaders •Usama Bin Laden Network •Usama Bin Laden Organisation	C
12	Islamic Republic of Afghanistan	Safa Nicu	•Safa Nicu Sepahan •Safanco Company •SafaNicu Afghanistan Company •Safa Al-Noor Company •SafaNicu Ltd Company	N

13	Islamic Republic of Afghanistan Islamic Republic of Pakistan	Ummah Tameer E-Nau (UTN)		N
14	Islamic Republic of Iran	7th of Tir	• 7th of Tir Complex • 7th of Tir Industrial Complex • 7th of Tir Industries • 7th of Tir Industries of Isfahan/Esfahan • MojtamaeSanateHaftomeTir • SanayeHaftomeTir • Seventh of Tir	N
15	Islamic Republic of Iran	Abadan Oil Refining Company	• Abadan Oil Refining Co.	N
16	Islamic Republic of Iran	Aban Air Cooler Company	• Aban Air Cooler Co.	N
17	Islamic Republic of Iran	Abzar Boresh Kaveh Co.	• BK Co.	N
18	Islamic Republic of Iran	Advanced Fibres Development Co.		B, C, M, N
19	Islamic Republic of Iran	Advanced Information and Communication Technology Center (AICTC)		M, N
20	Islamic Republic of Iran	Aerospace Industries Organization (AIO)	• SazemaneSanayeHavaFaza	M
21	Islamic Republic of Iran	AMA Industrial Company	• AMA Industrial Co.	N
22	Islamic Republic of Iran	Amin Industrial Complex	• Amin Industrial Compound • Amin Industrial Company	B, C, M, N
23	Islamic Republic of Iran	Amir Kabir University of Technology	• Amirkabir University of Technology	M, N
24	Islamic Republic of Iran	Ammunition and Metallurgy Industries Group (AMIG)	• Ammunition and Metallurgy Industry Group • Ammunition Industries Group • Sanaye Mohematsazi	N
25	Islamic Republic of Iran	Arak Petrochemical Co.	• Arak Petrochemical Company • Shazand (Arak) Petrochemical Corporation	M, N

26	Islamic Republic of Iran	Aras Farayande		N
27	Islamic Republic of Iran	Arfa Paint Company		M, N
28	Islamic Republic of Iran	Arfeh Company		M, N
29	Islamic Republic of Iran	Aria Nikan	• Pergas Aria Movalled Ltd. • Aria Nikan Tehran	N
30	Islamic Republic of Iran	Armament Industries Group (AIG)	• AIG-Armament Industries Group • Armament Industries	M, N
31	Islamic Republic of Iran	Armed Forces Geographical Organisation		M
32	Islamic Republic of Iran	Arya Niroo Nik		N
33	Islamic Republic of Iran	AshtianTablo		N
34	Islamic Republic of Iran	Atomic Energy Organization of Iran (AEOI)	• Sazeman-e Energy Atomi	B, C, M, N
35	Islamic Republic of Iran	Azarab Industries	• AzarAb Ind. Co. • Azar AB Industries Company	M, N
36	Islamic Republic of Iran	Bandar Abbas Oil Refining Company	• Bandar Abbas Refining Co.	C, M, N
37	Islamic Republic of Iran	Bank Melli Printing and Publishing Company (BMPPC)	• Bank Melli Printing Co.	M, N
38	Islamic Republic of Iran	Bargh Azaraksh	• Barghe Azerakhsh Sakht	N
39	Islamic Republic of Iran	Barzagani Tejarat Tavanmad Saccal companies	• Bazargani Tejarat Tavanmad Saccal companies	M, N
40	Islamic Republic of Iran	Behineh Trading Co.		N

41	Islamic Republic of Iran	Behnam Sahriyari Trading Company		N
42	Islamic Republic of Iran	Bonab Research Center (BRC)		N
43	Islamic Republic of Iran	Carvana Company	• CARVANA Co.	M, N
44	Islamic Republic of Iran	Cement Investment and Development Company (CIDCO)	• Cement Industry Investment and Development Company • CIDCO Cement Holding	M, N
45	Islamic Republic of Iran	Cruise Missile Industry Group	• 8th Imam Industries Group • Cruise Systems Industry Group • Samen Al-A'emmeh Industries Group • Naval Defence Missile Industry Group	M
46	Islamic Republic of Iran	Damavand Power Generation Management Company	• Damavand Power Generation Management • Damavand Power Generation Management Co.	M, N
47	Islamic Republic of Iran	Darou Pakhsh Company	• DarouPakhsh Pharmaceutical Manufacturing Company • DarouPakhsh Pharmaceutical Mfg. Co. • DarouPakhshPhrma Chem. Co. • DarouPakhshPharma. Co.	B, C
48	Islamic Republic of Iran	Davar Moharek Company	• DavarMoharek Co.	M, N
49	Islamic Republic of Iran	Defence Industries Organisation (DIO)	• Defense Industrial Organization • SASADJA • SasemanSanajeDefa • SazemaneSanayeDefa	B, C, M, N
50	Islamic Republic of Iran	Defense Technology and Science Research Center (DTSRC)	• Educational Research Institute	M, N
51	Islamic Republic of Iran	Digital Media Lab (DML)		M, N
52	Islamic Republic of Iran	Doostan International Company (DICO)		M
53	Islamic Republic of Iran	Electronic Components Industries (ECI)		M, N

54	Islamic Republic of Iran	Electro Sanam Company	•E. S. Co. •E. X. Co. •ES Co. •EX Co.	M
55	Islamic Republic of Iran	Esfahan Chemical Industries		B, C
56	Islamic Republic of Iran	Esfahan Nuclear Fuel Research and Production Centre (NFRPC)	•Esfahan Nuclear Technology Centre(ENTC) •Esfahan Nuclear Fuel and Procurement Company •NERPC	N
57	Islamic Republic of Iran	Esfahan Oil Refining Company (EORC)	•Esfahan Oil Refining Co. •NIORDC - Esfahan Oil Refining Company	N
58	Islamic Republic of Iran	Esfahan Steel Company	•ESCO	M, N
59	Islamic Republic of Iran	Eshteal Energy Engineering Company	•Eshteal Energy Engineering Co.	M, N
60	Islamic Republic of Iran	ESNICO (Equipment Supplier for Nuclear Industries Corporation)		N
61	Islamic Republic of Iran	Ettehad Technical Group		M
62	Islamic Republic of Iran	Eyvaz Technic		N
63	Islamic Republic of Iran	Fajr Aviation Composite Industries		M, N
64	Islamic Republic of Iran	Fajr Industrial Group	•Fadjr Industries Group (FIG) •Industrial Factories of Precision-Machinery •Instrumentation Factories of Precision Machinery •Instrumentation Factories Plant (IFP) •MojtameSantyAjzaeDaghigh •Nasr Industries Group	M, N
65	Islamic Republic of Iran	Fajr Petrochemical	•Fajr Petrochemical Co. •Fajr Petrochemical Company	B, C, N
66	Islamic Republic of Iran	Fanavari Azmayeshgahi	•EghlimSanaateSabz Co.	M
67	Islamic Republic of Iran	Farasakht Industries		M, N

68	Islamic Republic of Iran	Farasepehr Engineering Company		M, N
69	Islamic Republic of Iran	Farayand Technique	•Farayand Technic	N
70	Islamic Republic of Iran	Fater Institute	•Fater Engineering Company •Fater Engineering Institute •Faater Institute •GharargahGhaemFaater Institute	B, C, M, N
71	Islamic Republic of Iran	Fatsa		N
72	Islamic Republic of Iran	Fulmen	•Fulmen Group •Fulmen Company	N
73	Islamic Republic of Iran	Geological Survey of Iran		N
74	Islamic Republic of Iran	Ghaed Bassir Petrochemical Products Co.		M
75	Islamic Republic of Iran	Ghani Sazi Uranium Company	•Iran Uranium Enrichment Company	N
76	Islamic Republic of Iran	Gharagahe Sazandegi Ghaem	•GharargahGhaem •GharargaheSazandegiGhaem	B, C, M, N
77	Islamic Republic of Iran	Ghorb Karbala	•Gharargah Karbala •GharargahSazandegi Karbala-MoassesehTaha	B, C, M, N
78	Islamic Republic of Iran	Ghorb Nooh		B, C, M, N
79	Islamic Republic of Iran	Hara Company	•Hara Institute	B, C, M, N
80	Islamic Republic of Iran	Hirbod Co		N
81	Islamic Republic of Iran	Hong Kong Electronics	•Hong Kong Electronics Kish Co.	B, C, M, N
82	Islamic Republic of Iran	Hosseini Nejad Trading Company	•HosseiniNejad Trading Co.	M, N
83	Islamic Republic of Iran	Imam Hossein University (IHU)		B, C, M, N
84	Islamic Republic of Iran	Imensazan Consultant Engineers Institute(ICEI)	•Imensazen Consultant Engineers Institute •ImenSazan Consultant Engineers	B, C, M, N
85	Islamic Republic of Iran	Information Systems Iran (ISIRAN)		M, N

86	Islamic Republic of Iran	Iran Aircraft Industries (IACI)	• SAHA	M, N
87	Islamic Republic of Iran	Iran Aircraft Manufacturing Company(IAMCO)	• HESA • HESA Trade Center • HTC • IAMI • Iran Aircraft Manufacturing Industries • Iran Aircraft Manufacturing Industrial Company • KarkhanejateSanayeHavapaymaie Iran • HavaPeymaSazi-e Iran • HavapeymaSazi Iran • HavapeymaSazhran • Hevapeimasazi	M, N
88	Islamic Republic of Iran	Iran Aseman Airlines		M
89	Islamic Republic of Iran	Iran Centrifuge Technology Company	• TSA • TESA • The Iran Centrifuge Technology Company	N
90	Islamic Republic of Iran	Iran Communications Industries (ICI)	• I.C.I. • Iran Communication Industries • Iran Communications Industries Group • SanayeMokhaberat Iran	M
91	Islamic Republic of Iran	Iran Electronics Industries (IEI)	• Sanaye Electronic Iran • Sasad Iran Electronics Industries • SherkatSanayeh Electronics Iran	M, N
92	Islamic Republic of Iran	Iran Helicopter Support and Renewal		N
93	Islamic Republic of Iran	Iran Khodro Powertrain Company	• Iran Khodro Powertrain Co. (IPCO)	M, N
94	Islamic Republic of Iran	Iran Offshore Oil Company (IOOC)	• Iranian Offshore Oil Company (IOOC) • Iranian Offshore Oil Co.	N
95	Islamic Republic of Iran	Iran Polymer & Petrochemical Institute(IPPI)		M
96	Islamic Republic of Iran	Iran Powder Metallurgy Complex (I.P.M.C.)		N
97	Islamic Republic of Iran	Iran Research Organisation for Science and Technology (IROST)	• Iranian Research Organization for Science and Technology	B, C, M, N

98	Islamic Republic of Iran	Iran Saffron Company	• Iransaffron Co.	M, N
99	Islamic Republic of Iran	Iran Transfo Sherkate Sahami Aam		N
100	Islamic Republic of Iran	Iran University of Science and Technology(IUST)	• University of Elm-o-Sanat • Iran University of Science & Technology(IUST)	M, N
101	Islamic Republic of Iran	Iranian Aviation Industries Organization(IAIO)		M, N
102	Islamic Republic of Iran	Iranian Offshore Engineering & Construction Co. (IOEC)	• Iranian Offshore Engineering and Construction Company (IOEC)	N
103	Islamic Republic of Iran	Iran Marine Industrial Company (SADRA)	• Iran Marine Industrial Company • Iran Marine Industrial Company SSA • Iran SADRA • Iran Ship Building Co. • SherkateSanatiDaryai Iran	B, C, M, N
104	Islamic Republic of Iran	Iran Transfo		N
105	Islamic Republic of Iran	IRGC Air Force	• Islamic Revolutionary Guard Corps Air Force • SepahPasdaran Air Force	M
106	Islamic Republic of Iran	IRGC-Air Force Al-Ghadir Missile Command	• IRGC Missile Command • Islamic Revolutionary Guard Corps MissileCommand	M
107	Islamic Republic of Iran	IRGC Qods Force	• Pasdaran-e Enghelab-e Islami • Sepah-e Qods • IRGC QF	M
108	Islamic Republic of Iran	Isfahan Optics	• I. O. I.	M, N
109	Islamic Republic of Iran	Isfahan University of Technology (IUT)		M, N
110	Islamic Republic of Iran	Islamic Azad University (IAU)		N
111	Islamic Republic of Iran	Islamic Revolutionary Guard Corps (IRGC)	• AGIR • Iranian Revolutionary Guard Corps • IRG • Islamic Revolutionary Corps • Pasdaran • Pasdaran-e Enghelab-e Islami • Pasdaran-e Inqilab • Revolutionary Guard • Revolutionary Guards	M, N

			• Sepah • SepahPasdaran • Sepah-e Pasdaran-e Enqelab-e Eslami • The Army of the Guardians of the Islamic Revolution • The Iranian Revolutionary Guards	
112	Islamic Republic of Iran	Jabber Ibn Hayan	• JaberIbnHayan Research Laboratories • JaberIbnHayan • JaberIbnHayan Research Department • Jabir bin al-Hayyan Laboratory • JabrIbnHayan Multipurpose Laboratories • JHL	N
113	Islamic Republic of Iran	Javedan Mehr Toos		M, N
114	Islamic Republic of Iran	Joza Industrial Co.	• Joza Industries Company	M
115	Islamic Republic of Iran	Kala Naft	• Kala Naft Co. SSK • Kala Naft Company Ltd. • Kala Naft Tehran • Kala Naft Tehran Company • KalayehNaft Co. • M.S.P.-Kala • Manufacturing Support & Procurement Co.- Kala Naft • Manufacturing Support and Procurement (M.S.P.) Kala Naft Co. Tehran • Manufacturing, Support and Procurement Kala Naft Company • MSP Kala Naft Co. Tehran • MSP Kala Naft Tehran Company • MSP Kalanaft • MSP-Kalanaft Company • SherkatSahamiKhass Kala Naft • SherkatSahamiKhassPoshtibaniVaTehiyehKalayeNaft Tehran • SherkatePoshtibaniSakhtVaTaheih KalaieNafte Tehran	B, C, M, N
116	Islamic Republic of Iran	Kalaye Electric Company	• Kala-Electric • Kala Electric Company • Kalaye Electric • Kalaye Electric Co.	N
117	Islamic Republic of Iran	Karanir	• Moaser • TajhizSanat	N
118	Islamic Republic of Iran	Kaveh Cutting Tools Company	• Kaveh Cutting Tools • Kaveh Cutting Tools Complex	B, C, M, N

			•Kaveh Cutting Tools Factories	
119	Islamic Republic of Iran	Kavoshyar Company	•KavoshYaar •Kavoshyar •Kavoshyar Iran Co.	B, C, N
120	Islamic Republic of Iran	Khaje Nassir-Al-Deen Toosi University	•Khaje Nassir-Al-DeenToosi (K N Toosi)University •K N Toosi (Khaje Nassir-Al-DeenToosi)University	M, N
121	Islamic Republic of Iran	Khala Afarin Pars		N
122	Islamic Republic of Iran	Khatam al-Anbiya Construction Headquarters (KAA)	•KhatamolAnbiaGharargahSazandegi Nooh •Khatam al-Anbya •KhatamolAnbia •Khatem-olAnbiya Construction Organisation	B, C, M, N
123	Islamic Republic of Iran	Khorasan Metallurgy Industries	•Khorasan Ammunition and Metallurgy Industries •KhorasanMetalogy Industries •SanayeMetologie Iran •The Metallurgy Industries of Khorasan	N
124	Islamic Republic of Iran	Khorasan Petrochemical Company		C, M
125	Islamic Republic of Iran	Khouzestan Steel Co.	•Khouzestan Steel Company (Ahvaz)	M, N
126	Islamic Republic of Iran	M. Babaie Industries	•M. Babaie Industries •ShahidBabaie Industries •ShahidBabaie Industries Complex •ShahidBabaii Industries Co.	M
127	Islamic Republic of Iran	Machine Pardazan Co.	•Machine Pardazan Co. Ltd. •Machine Pardazan Ltd.	M
128	Islamic Republic of Iran	Machine Sazi Arak (MSA)	•Machine Sazi Arak Company •Machine Sazi Arak Company PJSC •Machine Sazi Arak SSA •MashinSazi Arak	M, N
129	Islamic Republic of Iran	Makin	•Makin Institute •Makin Company	B, C, M, N
130	Islamic Republic of Iran	Malek Ashtar University	•Malekashtar University of Technology •Daneshgah-E Sana'Ti-Ye Malek-E Ashtar •MalekAshtar Aviation Universtiy Complex •MalekAshtar Industrial	M, N

			University • Malek Ashtar University of Defense Technology • Malek-E Ashtar Technical University • Malek-E Ashtar University	
131	Islamic Republic of Iran	Mapna Boiler Engineering	• MAPNA Boiler Engineering & Manufacturing Co.	N
132	Islamic Republic of Iran	Mapna Generator Company	• Mapna Generator Co. (Pars)	M, N
133	Islamic Republic of Iran	Mapna Generator Engineering and Manufacturing Company (Pars)	▪ Mapna Generator Engineering & manufacturing Co. PARS	N
134	Islamic Republic of Iran	Mapna Turbine Blade Engineering and Manufacturing Company, PARTO		M, N
135	Islamic Republic of Iran	MAPNA Turbine Engineering & Manufacturing Co. (TUGA)		M, N
136	Islamic Republic of Iran	Marine Industries		M, N
137	Islamic Republic of Iran	Marou Sanat	▪ MOHANDESI Tarh Va Toseh Maro Sanat Company	N
138	Islamic Republic of Iran	MASNA (Moierat Saakht Niroogahye Atomi Iran)		N
139	Islamic Republic of Iran	MATSA (Mohandesi Toseh Sokht Atomi Company)		N
140	Islamic Republic of Iran	Mavadkaran Jhahed Noavar Company	▪ Mavadkaran Engineering Company	N
141	Islamic Republic of Iran	MAVT Co.	▪ Amozeh Va Tahgiagti (ERI) ▪ Educational and Research Institute (ERI)	M
142	Islamic Republic of Iran	Mazandaran Cement Company		M, N
143	Islamic Republic of Iran	Maxandaran Textile Company	▪ Sherkate Nasaji Mazandaran	M, N
144	Islamic Republic of Iran	Mechanic Industries Group		M
145	Islamic Republic of Iran	Mehr Engineering Company		M
146	Islamic Republic of Iran	Melli Agrochemical Company PJS	▪ Melli Shimi Keshavars ▪ Sherkat Melli Shimi Keshavarz	M, N
147	Islamic Republic of Iran	Mesbah Energy Company (NEC)	▪ Mesbah Energy Co.	N

148	Islamic Republic of Iran	Ministry of Defense and Armed Forces Logistics (MODALF)	- Ministry of Defence for Armed Forces Logistics - Ministry of Defense and Support for Armed Forces Logistics (MODSAF)	M, N
149	Islamic Republic of Iran	Ministry of Defense Logistics Export (MODLEX)	Ministry of Defense Legion Export	M, N
150	Islamic Republic of Iran	Mizan Machinery Manufacturing (3M)	3MG - Mizan Machine Manufacturing Group	M, N
151	Islamic Republic of Iran	Mobarakeh Steel Company		B, C, N
152	Islamic Republic of Iran	Mobin Sanjesh (alias firco)		N
153	Islamic Republic of Iran	Modem Industries Technique Company (MITEC)	- Rahkar Cmpany - Rahkar Industries - Rahkar Sanaye Company - Rahkar Sanaye Novin	N
154	Islamic Republic of Iran	Multimat Ic Ve Dis Ticaret Pazarlama	- Multimat Domestic and Foreign Trade Marketing Ltd. - Multimat Tehran	M
155	Islamic Republic of Iran	Naserin Vahid		M, N
156	Islamic Republic of Iran	National Iranian Copper Industries Company (NICICO)	- National Iranian Copper Company - National Iranian Copper Industries Co.	C, M, N
157	Islamic Republic of Iran	National Iranian Drilling Company (NIDC)		N
158	Islamic Republic of Iran	National Iranian Gas Company (NIGC)		M, N
159	Islamic Republic of Iran	National Iranian Oil Co. (NIOC)	National Iranian Oil Company	B, C, N
160	Islamic Republic of Iran	National Iranian South Oil Company (NISOC)		M, N
161	Islamic Republic of Iran	National Iran Steel Company (NISCO)	National Iranian Steel Corporation (NISCO)	N
162	Islamic Republic of Iran	National Petrochemical Company (NPC)		C, N
163	Islamic Republic of Iran	National Research Center for Genetic Engineering and Biotechnology (NRCGEB)		B
164	Islamic Republic of Iran	Neda Industrial Group		N
165	Islamic Republic of Iran	Neka Novin		N

166	Islamic Republic of Iran	Niru Battery Manufacturing Company	- Nirou Battery Manufacturing Saba Battery Company - Niru Battery Mfg. Co. - Niru Co. Ltd. - Sherkat Battery Sazi Niru Sahami Khass - The Niru Battery Company	M
167	Islamic Republic of Iran	Noavaran Pooyamoj		N
168	Islamic Republic of Iran	Noor Afza Gostar	- Noor Afzar Gostar - NooAfzar Gostat Company - NAGCO - NAGC	N
169	Islamic Republic of Iran	Novin Energy Company	- Energy Novin - Noveen Energy Company - Pars Novin	N
170	Islamic Republic of Iran	Nuclear Fuel Production and Procurement Company (NFPC)		N
171	Islamic Republic of Iran	Nuclear Research Center for Agriculture and Medicine (NFRPC)	- Center for Agricultural Research and Nuclear Medicine - Karaj Nuclear Research Centre - Karaji Agricultural and Medical Research Center - NRCAM	N
172	Islamic Republic of Iran	Oil Turbo Compressor Company (OTC)	- Oil Turbo Compressor (OTC) - OTC CO. (Oil Turbo-Compressor Co.)	B, C, M, N
173	Islamic Republic of Iran	Oil Turbo Compressor Gas Turbine Co. (OTCT)	'''	M, N
174	Islamic Republic of Iran	Oil Turbocompressor Engineering Co. (OTEC)	Oil Turbocompressor Engineering Company	B, C, M, N
175	Islamic Republic of Iran	Omran Sahel		B, C, M, N
176	Islamic Republic of Iran	Oriental Oil Kish		B, C, M, N
177	Islamic Republic of Iran	Pajouheshi Electron Co.	Pajouheshi Electron Co. Ltd.	N
178	Islamic Republic of Iran	Parchin Chemical Industries (PCI)	- Para Chemical Industries - Parchin Chemical Factories (PCF) - Parchin Chemical Industries Group	C, M
179	Islamic Republic of Iran	Pars Aviation Services Company		B, C, ,M ,N
180	Islamic Republic of Iran	Pars Oil & Gas Company (POGC)	- Pars Oil and Gas Co. - Pars Oil and Gas Company	N
181	Islamic Republic of Iran	Pars Switch Co.	Pars Switch Company	M, N

182	Islamic Republic of Iran	Pars Trash Company	▪ Pars Tarash ▪ Pars Trash ▪ Pars Terash	N
183	Islamic Republic of Iran	Parto Sanat Company	▪ Parto Sanat Co,	N
184	Islamic Republic of Iran	Passive Defense Organization		N
185	Islamic Republic of Iran	Pasteur Institute of Iran	▪ Institute Pasteur of Iran ▪ Institute Pasteur	B, C
186	Islamic Republic of Iran	Paya Parto	▪ Paya Partov ▪ Paya Partov Co,	N
187	Islamic Republic of Iran	Pejman Industrial Services Corporation		M
188	Islamic Republic of Iran	Pentance Chemistry Industries (PCI)	▪ Pentance Chemistry ▪ Pentance Chemistry Industries Company ▪ Pentance Chemistry Industry Company	N
189	Islamic Republic of Iran	Perse Sanco Ltd.	▪ Perse-Sanco	M, N
190	Islamic Republic of Iran	Pishgam (Pioneer) Energy Industries (PEI)	▪ Pioneer Energy Industries Company ▪ Pishgam Energy Industries Development	N
191	Islamic Republic of Iran	Pouya Control		N
192	Islamic Republic of Iran	Qods Aeronautics Industries		B, C, M, N
193	Islamic Republic of Iran	Raad Iran	▪ Raad Automation Company	N
194	Islamic Republic of Iran	Rah Sahel	▪ Rah Sahel Institute	B, C, M, N
195	Islamic Republic of Iran	Rahab Engineering Institute	▪ Rahab Institute ▪ (formerly known as) Rahsaz Institute	B, C, M, N
196	Islamic Republic of Iran	Raka		N
197	Islamic Republic of Iran	Razi Institute	▪ Razi Institute for Sera and Vaccine ▪ Razi Vaccine and Serum Research Institute	B, C
198	Islamic Republic of Iran	Razi Petrochemical Co.	▪ Razi Petrochemical Company	N
199	Islamic Republic of Iran	Research Centre for Explosion and Impact	▪ METFAZ	N
200	Islamic Republic of Iran	Research Institute of Nuclear Science & Technology	▪ Research Institute of Nuclear Science and Technology ▪ Nuclear Science and	M, N

			Technology Research Institute	
201	Islamic Republic of Iran	Research Institute of Petroleum Industry (RIPI)		C, N
202	Islamic Republic of Iran	Rosmachin		N
203	Islamic Republic of Iran	Sad Export Import Company	▪ SAD Import & Export Company	N
204	Islamic Republic of Iran	Safa Nicu	▪ Safa Nicu Sepahan ▪ Safanco Company ▪ Safa Al-Noor Company ▪ Safa Nicu Ltd Company	N
205	Islamic Republic of Iran	Safety Equipment Procurement (SEP)	▪ Safety Equipment Procurement Company ▪ SEP Co.	B, C, M, N
206	Islamic Republic of Iran	Sahel Consultant Engineers	▪	B, C, M, N
207	Islamic Republic of Iran	Sakhte Turbopomp va Kompessor (SATAK)	▪ Turbo Compressor Manufacturer ▪ TCMFG	M
208	Islamic Republic of Iran	Samamicro Company	▪	B, M
209	Islamic Republic of Iran	Saman Nasb Zayendeh Rood	▪ Saman Nasbzainde Rood	N
210	Islamic Republic of Iran	Samen Industries	▪	N
211	Islamic Republic of Iran	Sanam Industrial Group	▪ Sanam Industries Group	M, N
212	Islamic Republic of Iran	Schiller Novin	▪	M, N
213	Islamic Republic of Iran	Sepanir	▪ Sepah Nir ▪ Sepanir Establishment ▪ Sepanir Oil and Gas Energy Engineering Company	B, C, M, N
214	Islamic Republic of Iran	Sepasad Engineering Company	▪	B, C, M, N
215	Islamic Republic of Iran	Shafa-e-Sari Co.	▪ Antibiotic Producing Co, ▪ Shafa-e-Sari Company	B, C, N
216	Islamic Republic of Iran	Shahid Ahmad Kazemi Industrial Group (SAKIG)	▪	M
217	Islamic Republic of Iran	Shahid Bagheri Industrial Group (SBIG)	▪ Shahid Bakeri Industrial Group ▪ Shahid Bagheri Industrial Group ▪ Shahid Hassan Bagheri Industrial Factories Group (SHBIFG) ▪ Mahtab Technical Engineering Co.	M

218	Islamic Republic of Iran	Shahid Hemmat Industrial Group (SHIG)	- Shahid Hemat Industrial Group - Sabalan Company - Sahand Aluminum Parts Industrial Company (SAPICO) - Tiz Pars	M
219	Islamic Republic of Iran	Shahid Karrazi Industries		M
220	Islamic Republic of Iran	Shahid Sattari Industries	Shahid Sattari Group Equipment Industries	M
221	Islamic Republic of Iran	Shahid Sayyade Shirazi Industries (SSSI)	- Shahid Sayyad Shirazi Industries - Shahid Sayyed Shirazi Ind,	B, C, M, N
222	Islamic Republic of Iran	Shakhese Behbud Sanat		N
223	Islamic Republic of Iran	Sharif University of Technology (SHFT)	- Sharif Technical University - SUT	M, N
224	Islamic Republic of Iran	Sherkate Tozie Iran Transfo Zangan		N
225	Islamic Republic of Iran	Shetab G.		M, N
226	Islamic Republic of Iran	Shetab German		M, N
227	Islamic Republic of Iran	Shetab Trading		M, N
228	Islamic Republic of Iran	Shian Co,		M
229	Islamic Republic of Iran	Shiraz Electronics Industries (SEI)	Shiraz Electronic Industries	M
230	Islamic Republic of Iran	Shiraz Petrochemical Company (SPC)	- Shiraz Petrochemical Complex - Shiraz Petrochemical Co.	B, M, N
231	Islamic Republic of Iran	Shiraz University		M, N
232	Islamic Republic of Iran	Sho'a' Aviation		B, C, M, N
233	Islamic Republic of Iran	Shomal Cement Company	- Siman Shomal - Shemal Cement Company	M, N
234	Islamic Republic of Iran	Simatic Development Co.		N
235	Islamic Republic of Iran	Soreh (Nuclear Fuel Reactor Company)		N
236	Islamic Republic of Iran	Southern Zagros Oil and Gas Production Compnay	- Southern Zagroug Oil and Gas Production Company - Southern Zagross Oil and	N

			- Gas Production Compant - Southern Zagros Oil & Gas Production Co, - South Zagros Oil & Gas Company	
237	Islamic Republic of Iran	Special Industries Group (SIG)		B, C, M, N
238	Islamic Republic of Iran	State Purchasing Organisation (SPO)		M, N
239	Islamic Republic of Iran	SUREH (Nuclear Reactors Fuel Company)		N
240	Islamic Republic of Iran	TABA (Iran Cutting Tools Manufacturing company- Taba Towlid Abzar Boreshi Iran)		N
241	Islamic Republic of Iran	Tabriz Oil Refining Co		N
242	Islamic Republic of Iran	Tajhiz Sanat SHayan (TSS)		N
243	Islamic Republic of Iran	TAMAS Company	- Nuclear Fuel Production Company - TAMAS - Tamas Company	N
244	Islamic Republic of Iran	Tarbiat Modarres University		B, C, M, N
245	Islamic Republic of Iran	Tehran Nuclear Research Centre (TNRC)		N
246	Islamic Republic of Iran	Test Tafsir		N
247	Islamic Republic of Iran	Three Star Servicess Co. (T.S.S Co.)		M, N
248	Islamic Republic of Iran	Tidewater Middle East Co.	- Tidewater - Tide Water Company - Tide water middle east marine service - Tidewater Co. (Middle east marine services)	N
249	Islamic Republic of Iran	Tima Kala Tehran Eng, Co. Ltd.	- Tima Kala Tehran Eng, Company - Tima Kala Tehran Eng. Company Ltd. - Tima Kala Tehran Engineering Co Ltd.	N
250	Islamic Republic of Iranq	Turbine Engineering Manufacturing (TEM)	T.E.M. Co.	N
251	Islamic Republic of Iran	University of Tehran	Tehran University	B, C, M, N
252	Islamic Republic of Iran	Vakav Kimia Novin	- Vakav Kimia Novin Ltd - Vakav Kimia Novia Ltd.	M, N

253	Islamic Republic of Iran	Value-Added Services Laboratory (VASL)	MOBILE value-Added Services Laboratory	M, N
254	Islamic Republic of Iran	West Regional Electricity Company	- West Regional Electrical Company - West Regional Electric Company	N
255	Islamic Republic of Iran	Y.A.S Company	- Y.A.S. Co. Ltd. - YAS Co. Ltd.	M, N
256	Islamic Republic of Iran	Yarsanat	- Yar Sanat - Yarestan Vacuumi - Yarsanat Co. Ltd.	N
257	Islamic Republic of Iran	Yas Air	- Yas Air Kish - Yas Air Cargo Airline	N
258	Islamic Republic of Iran	Ya Mahdi Industries Group	- Ya Mahdi Industrial Complex - Ya Mahdi Industrial Research Complex - YMA	M
259	Islamic Republic of Iran	Yasa Part		M, N
260	Islamic Republic of Iran	Yazd Metallurgy Industries (YMI)	- Directorate of Yazd Ammunition and Metallurgy Industries - Yazd Ammunition Manufacturing and Metallurgy Industries - Yazd Metallurgical Ind's Co. - Yazd Metallurgical Industries	B, C, M, N
261	Islamic Republic of Pakistan	Advance Computing & Engineering Solutions (Pvt) Ltd.	- Advance Computing & Engineering - Advance Computing & Eng. Solutions Ltd.	M
262	Islamic Republic of Pakistan	Advance Engineering Research Organization (AERO)		M
263	Islamic Republic of Pakistan	Aircraft Manufacturing Factory (AMF)	Pakistan Aeronautical Complex (PAC)	M,N
264	Islamic Republic of Pakistan	Allied Trading Co.	Allied Engineering and Trading Company Ltd.	M, N
265	Islamic Republic of Pakistan	Al Technique Corporation of Pakistan, Ltd.	Al-Techniques Corporation of Pakistan (Pvt) Ltd.	N
266	Islamic Republic of Pakistan	Attock Refinery Limited	Attock Refinery	N
267	Islamic Republic of Pakistan	Capital Engineering Services (Pvt) Ltd.		C, M, N
268	Islamic Republic of Pakistan	Centre for Scientific Studies		N
269	Islamic Republic of Pakistan	Chas(h)ma Nuclear Power Plant (CHASNUPP)		M, N

270	Islamic Republic of Pakistan	Defence Science and Technology Organization (DESTO)	▪	B, C, M
271	Islamic Republic of Pakistan	Hamco	▪	C, M, N
272	Islamic Republic of Pakistan	Heavy Mechanical Complex	▪	M, N
273	Islamic Republic of Pakistan	Heavy Mechanical Complex-3	▪	M, N
274	Islamic Republic of Pakistan	Institute of Nuclear Medicine Oncology and Radiology (INOR)	▪ Nuclear Medicine Oncology and Radiology Institute (NORI)	N
275	Islamic Republic of Pakistan	Ittehad Chemicals Limited	▪	C, M, N
276	Islamic Republic of Pakistan	Karachi Nuclear Power Complex (KANUPP)	▪ Karachi Nuclear Power Plant	N
277	Islamic Republic of Pakistan	Khan Research Laboratories (KRL)	▪ Abdul Qader Khan Research Laboratories ▪ Engineering Research Research Laboratories (ERL)	B, C, M, N
278	Islamic Republic of Pakistan	L.T. Engineering & Trade Services (Pvt.) Limited	▪ L.T. Engineering & Trade Services (Pvt) Ltd. ▪ L.T. Engineering & Trade Services PVT (LTD)	M, N
279	Islamic Republic of Pakistan	Mechanical Engineering Workshop (MEW)	▪	M, N
280	Islamic Republic of Pakistan	National Development Center (NDC)	▪ National Development Complex	M, N
281	Islamic Republic of Pakistan	Pakistan Atomic Energy Commission (PAEC)	▪	M, N
282	Islamic Republic of Pakistan	Pakistan Council of Scientific & Industrial Research (PCSIR)	▪ Pakistan Council of Scientific and Industrial Research Laboratories Complex	B, C, N
283	Islamic Republic of Pakistan	Pakistan Institute of Engineering & Applied Sciences (PIEA)	▪	N
284	Islamic Republic of Pakistan	Pakistan Institute of Nuclear Science and Technology (PINSTECH)	▪	N
285	Islamic Republic of Pakistan	Pakistan Ordnance Factories (POF)	▪ Wah Munitions Plant ▪ Explosive Factory	B, C, M, N
286	Islamic Republic of Pakistan	People's Steel Mills Ltd.	▪	C, M, N
287	Islamic Republic of Pakistan	Precision Forging Pvt. Ltd.	▪ Precision Forging Pvt Limited	M, N
288	Islamic Republic of Pakistan	Quaid-I-Azam University (QAU)	▪ Quaid-E-azam University	M, N

289	Islamic Republic of Pakistan	Sitara Chemical Industries Ltd.	▪ Sitara Chemicals Industries Ltd.	C, M, N
290	Islamic Republic of Pakistan	S.M.B Associates	▪ SMB Associates ▪ S.M.B. Associates	N
291	Islamic Republic of Pakistan	Space and Upper Atmosphere Research Commission (SUPARCO)	▪	M
292	Islamic Republic of Pakistan	Unique Technical Promoters	▪	N
293	Islamic Republic of Pakistan	Victor Star (Pvt) Ltd.	▪	C, N
294	North Korea	4.27 Co. Pyongyang Branch	▪	B, C, M, N
295	North Korea	Academy of Health and Food Science	▪ Institute of Health and Food	B,C
296	North Korea	Amoraggang Development Banking Corporation	▪ Amroggang Development Bank ▪ Amnokkang Development Bank ▪ Amrokkang Development Bank	B, C, M, N
297	North Korea	Bank of East Land	▪ Dongbang Bank ▪ Tongbang Bank ▪ Tongbang U'Nhaeng	B, C, M, N
298	North Korea	Chong Unsan-5 Co., Ltd.	▪ Chongunsan-5 Co., Ltd.	B, C, M, N
299	North Korea	Chosong Central Bank	▪ Central Bank of DPRK	B, C, M, N
300	North Korea	Construction Development, Samsu Power Plan, Ryanggangdo	▪	B, C, M, N
301	North Korea	Daehung Oil & Vehicle Trading Co.	▪ Taehung Oil & Vehicle Trading Co.	B, C, M, N
302	North Korea	Daiheung Chengyen	▪ Daehung Chengyen Mine	B, C, M, N
303	North Korea		▪	B, C, M, N
304	North Korea	EFCO Corporation	▪ EFCO Corp. Pyongyang Branch	B, C, M, N
305	North Korea	Fhangin Co. Ltd.	▪	B, C, M, N
306	North Korea	First Trust Finance Co. Ltd.	▪	B, C, M, N
307	North Korea	General Bureau of Atomic Energy (GBAE)	▪ General Department of Atomic Energy (GDAE)	N
308	North Korea	Green Pine Associated Corporation	▪ Ch'o'ngsong Yo'nhap ▪ Cho'ngsong United Trading Company ▪ Chongsong Chowo'n Kaebal T'uja Hoesa ▪ Jindallae ▪ Ku'mhaeryong Company Ltd ▪ Natural Resources Development and Investment Corporation ▪ Saeingp'il Company	B, C, M, N
309	North Korea	Hesong Trading Corporation	▪	B, C, M, N
310	North Korea	Hwanghai Steel Union Co., Ltd.	▪ Hwanghai Iron Works	B, C, M, N
311	North Korea	Il Sim International Bank	▪	B, C, M, N

312	North Korea	Jangsu 100	▪ Korea Jangsu Trading Corporation	B, C, M, N
313	North Korea	K.N. technology Development Co.	▪	B, C, M, N
314	North Korea	Kim Chaek Iron Works	▪ Kim Chaek Steel Union Corp. ▪ Kim Chaek Iron and Steel Complex	B, C, M, N
315	North Korea	Kim Chaek University of Technology	▪	B, C, M, N
316	North Korea	Kim Il Sung University	▪	N
317	North Korea	Korea 56 Trading	▪ Korea 56 Trading Corp.	B, C, M, N
318	North Korea	Korea Choei Syouji	▪	B, C, M, N
319	North Korea	Korea Complex Equipment Import Corporation	▪	B, C, M, N
320	North Korea	Korea Daesong Bank	▪ Choson Taesong Unhaeng ▪ Taesong Bank	B, C, M, N
321	North Korea	Korea Daesong Trading Corporation	▪ Daesong-K6 ▪ Daesong-T3 Trading Corporation ▪ Daesong Trading ▪ Daesong Trading Company ▪ Korea Daesong-8 Trading Corporation ▪ Korea Daesong General Trading Corporation ▪ Korea Daesong Seil Trading Corporation ▪ Korea Daesong Jeil Trading Corporation ▪ Korea Deasong Jei Trading Corporation ▪ Korea Daesong Jesam Trading Corporation ▪ Korea Daesong Jeo Trading Corporation ▪ Korea Daesong Jeryuk Trading Corporation ▪ Korea Daesong Jechil Trading Corporation ▪ Korea Daesong Jepal Trading Corporation ▪ Korea Daesong Jegu Trading Corporation ▪ Korea Daesong Trading Company ▪ Korea Daesong Transportation Company	B, C, M, N
322	North Korea	Korea Dongsong Technical Corporation	▪ Korea Dongsong Technology Corp.	B, C, M, N
323	North Korea	Korea Dongyang Trading Corp.	▪ Korea Tongyang Trading Corp	B, C, M, N
324	North Korea	Korea Economics Co-operation Committee	▪	B, C, M, N
325	North Korea	Korea Foreign Technical Trade Center	▪	B, C, M, N
326	North Korea	Korea General Trading Corporation	▪	B, C, M, N
327	North Korea	Korea Heungjin Trading Company	▪ Hunjin Trading Co, ▪ Korea Henjin Trading Co,	B, C, M, N

			▪ Korea Hengjin Trading Company	
328	North Korea	Korea Hyoksin Trading Corporation	▪ Korea Hyoksin Export and Import Corporation	B, C, M, N
329	North Korea	Korea International Chemical Joint Venture Company	▪ Chosun International Chemicals Joint Operation Company ▪ Chosun International Chemicals Joint Operation Company ▪ International Chemical Joint Venture Corporation ▪ Korea International Chemicals Joint Operation Company ▪ Korea International Chemical Joint Venture Corp,	B, C, M, N
330	North Korea	Korea Kangsong Trading Corp.	▪	B, C, M, N
331	North Korea	Korea Kuk Sabong Joint Venture Company	▪ Korea Kuksabong Joint Venture Corp.	B, C, M, N
332	North Korea	Korea Kuwolsan Trading Co,	▪	B, C, M, N
333	North Korea	Korea Kwangson Banking Co. (KKBC)	▪	B, C, M, N
334	North Korea	Korea Kwangsong Trading Corporation	▪	B, C, M, N
335	North Korea	Korea Mangyong Trading Corporation	▪	B, C, M, N
336	North Korea	Korea Mining Development Trading Corporation (KOMID)	▪ Changgwang Sinyong Corporation ▪ Changgwang Trading Corp. ▪ DPRKN Mining Development Trading Corporation ▪ External Technology General Corporation ▪ North Korea Mining Development Trading Corporation	B, C, M, N
337	North Korea	Korea Paekho 7 Trading	▪	B, C, M, N
338	North Korea	Korea Pugang Mining and Machinery Corporation Ltd.	▪	B, C, M, N
339	North Korea	Korea Pugang Trading Corporation	▪	B, C, M, N
340	North Korea	Korea Puhung Trading Corporation	▪	B, C, M, N
341	North Korea	Korea Pyong-yang Rocksan Trading Corporation	▪ Korea Pyongyang Rocksan Trading Corporation	B, C, M, N
342	North Korea	Korea Pyongwong Trading Co.	▪ Korea Pyongwon Trading Co.	B, C, M, N
343	North Korea	Korea Ragwon Department	▪ Korea Rakwon Department	B, C, M, N
344	North Korea	Korea Ragwon Trading Corporation	▪ Korea Rakwon Trading Corp.	B, C, M, N
345	North Korea	Korea Rason Moran Company	▪	B, C, M, N
346	North Korea	Korea Red Cross Hospital	▪	B, C, M, N

347	North Korea	Korea Rungra-888 Trading Corporation	▪ Korea Rungra 888 Trading Co, ▪ Korea Rungra-888 Muyeg Hisa	B, C, M, N
348	North Korea	Korea Rungrado (General) Trading Co,	▪ Korea Rungrado Jonsong Trading Co.	B, C, M, N
349	North Korea	Korea Ryonbong General Corporation (KRGK)	▪ Korea Yonbong General Corporation ▪ (formerly known as) Lyongaksan General Trading Corporation	B, C, M, N
350	North Korea	Korea Ryongwang Trading Corporation	▪ Korea Ryenwang Trading Corporation ▪ Korean Ryenwang Trading Corporation	B, C, M, N
351	North Korea	Korea Ryonha Machinery Joint Venture Corporation	▪ Chosun Yunha Machinery Joint Operation Company ▪ Chosun Yunha Machinery J.V. Corporation ▪ Korea Ryenha Machinery J.V. Corporation ▪ Ryonha Machinery Joint Venture Corporation	B, C, M, N
352	North Korea	Korea Ryonha-2 Trading Corporation	▪ Ryoechap-2 Trading Co. ▪ Ryoechap-2	B, C, M, N
353	North Korea	Korea Ryusong Co., Ltd.	▪	B, C, M, N
354	North Korea	Korea Suho Trading Corporation	▪	B, C, M, N
355	North Korea	Korea SUNgri Trading Corporation	▪	B, C, M, N
356	North Korea	Korea Taesong Trading Company	▪	B, C, M, N
357	North Korea	Korea Tonghae Shipping Company	▪	B, C, M, N
358	North Korea	Korea Undok Trading Corporation	▪	B, C, M, N
359	North Korea	Korea Wonbong Trading Corp.	▪ Korea Wongbong Co., Ltd.	B, C, M, N
360	North Korea	Korea Zinc Industrial Group	▪	M
361	North Korea	Korean Committee for Space Technology	▪	B, C, M, N
362	North Korea	Korean Tangun Trading Corporation	▪ Korea Dangun Trading Corporation ▪ Korea Tangun Trading Corporation ▪ Tangun Trading	B, C, M, N
363	North Korea	Kumgang Engine J.V. Co.	▪	B, C, M, N
364	North Korea	Kumsan JVC Pty Ltd.	▪ Kumsan Joint Venture Pty Co. Ltd.	B, C
365	North Korea	Lyeongaksan Complex	▪ Lyongaksan General Trading Corp.	B, C, M, N
366	North Korea	Machinery Exp. And Imp. Copr.	▪	B, C, M, N
367	North Korea	Munitions Industry Department	▪ Military Supplies Industry Department	B, C, M, N
368	North Korea	Namchongang Trading Corporation	▪ NCG ▪ Nam Chon Gang Corporation ▪ Nam Chong Gan Trading Corporation ▪ Namchongang Trading	N

			▪ Namchongang Trading Co,	
369	North Korea	Namheung Youth Chemical Fertilizer Factory	▪	M, N
370	North Korea	Namhung Chemical Plant	▪ Namhung Chemical Union Complex	M
371	North Korea	Namnsan 2 Company	▪ Namsan 2 trading Corp.	B, C, M, N
372	North Korea	National Defense College	▪ Kanggye Defense College	N
373	North Korea	New East International Trading Ltd., Pyongyang Office	▪	B, C, M, N
374	North Korea	Office 39	▪ Bureau 39 ▪ Central Committee Bureau 39 ▪ Division 39 ▪ Office #39 ▪ Office No. 39 ▪ Third Floor	B, C, M, N
375	North Korea	Peace Motors Corporation	▪ Pyonghwa General Motor Company	B, C, M, N
376	North Korea	Ponghwa General Trading Corporation	▪	N
377	North Korea	Ponghwa Hospital	▪ Bonghwa Hospital	B, C, M, N
378	North Korea	Potonggang Cooperative of Optical Glass Production	▪	N
379	North Korea	Pyongyang City Construction Bureau	▪	B, C, M, N
380	North Korea	Pyongyang Gomu Gongjang	▪ Pyongyang Rubber Factory	B, C, M, N
381	North Korea	Pyongyang Informatics Centre	▪ Pyongyang Information Center	B, C, M, N
382	North Korea	Pyongyang Maternity Hospital	▪	B, C, M, N
383	North Korea	Pyongyang Public Library	▪	B, C, M, N
384	North Korea	Pyongyang Road Construction Office	▪	B, C, M, N
385	North Korea	Pyongyang Technical University	▪	N
386	North Korea	Pyongyang Telephone Exchange	▪	B, C, M, N
387	North Korea	Pyongyang Trading Company	▪ Pyongyang Central Zoo	B, C, M, N
388	North Korea	RA-HAE Trading Co., Ltd.	▪	B, C, M, N
389	North Korea	Rakwon 929 Import Corporation	▪ Ragwon 929 Import Corporation	B, C, M, N
390	North Korea	Reconnaissance General Bureau (RGB)	▪ Chongch'al Ch'ongguk ▪ General Bureau of Reconnaissance ▪ General Bureau of Surveillance ▪ General Reconnaissance Bureau ▪ KPA Unit 586	B, C, M, N
391	North Korea	Rimyongsu Trading Corporation	▪	B, C, M, N
392	North Korea	Samhung Corporation	▪ Korea Samhung Trading Corp.	B, C, M, N
393	North Korea	San Yong Co. Ltd.	▪ Sanyong Co. Ltd. ▪ Sanyong Joint Venture Co.	B, C, M, N

394	North Korea	Second Academy of Natural Sciences	▪ 2nd Academy of Natural Sciences ▪ Academy of Natural Sciences ▪ Chayon Kwahak-Won ▪ Kukpang Kwahak-Won ▪ National Defense Academy ▪ SANSRI ▪ Second Academy of Natural Sciences Research Institute	B, C, M, N
395	North Korea	Second Economic Committee		M, N
396	North Korea	Seibu Co. Ltd.		B, C, M, N
397	North Korea	Shinhung Trading	▪ Shinfung trading	B, C, M, N
398	North Korea	Sobaeksu United Corp.	▪ Sobaeksu United Corp. ▪ Korea Sobauksu United Co.	B, C, M, N
399	North Korea	Sosong Food Factory	▪	B, C, M, N
400	North Korea	State Academy of Science of the DPRK Institute of Automation	▪	M
401	North Korea	Sunchon Cement Factory	▪	B, C, M, N
402	North Korea	Sun Hwa Gang Co, Ltd.	▪ (Korea) Sunhwagang Trading Co	B, C, M, N
403	North Korea	Taeon Electric Factory	▪ Daeon Electric Factory	B, C, M, N
404	North Korea	Taeon Friendship Glass Factory, Pyongan Namdo	▪ Daeon Friendship Glass Factory	B, C, M, N
405	North Korea	Taeon Heavy Machinery Complex	▪ Daeon Heavy Machinery Complex ▪ Daeon Machinery Factory ▪ Taeon Machinery Factory	N
406	North Korea	Tanchon Commercial Bank	▪ Danchon Commercial Bank ▪ (formerly known As) Changgwang Credit Bank ▪ (formerly known as) Korea Changgwang Credit Bank	B, C, M, N
407	North Korea	Tosong Technology Trading Corporation	▪	B, C, M, N
408	North Korea	Trade Bank of DPRK	▪ Mooyukeunhaeng	B, C, M, N
409	North Korea	Undok Chemical Factory	▪	C
410	North Korea	University of Chemical Industry	▪	N
411	North Korea	Yong Byon Nuclear Research Centre	▪	N
412	North Korea		▪	B, C, M, N
413	People's Republic of China	AVIC Beijing Aeronautical Manufacturing Technology Research Institute	▪	M
414	People's Republic of China	Beijing Alite Technologies Co. Ltd. (ALCO)	▪ Beijing Haili Lianhe Keji Youxian Gongsi	M
415	People's Republic of China	Beijing Institute of Structure and Environmental Engineering (BISE)	▪ 702nd Reasearch Institute, China Academy of Launch Vehicle Technology (CALT) ▪ Beijing Institute of Strength and Environmental Engineering	M
416	People's Republic of China	Beijing University of Aeronautics and Astronautics (BUAA)	▪ Beihang University	M

417	People's Republic of China	Chengdu Rongsheng Pharmaceuticals Co. Ltd.	▪	B
418	People's Republic of China	China Academy of Launch Vehicle Technology (CALT)	▪ First Academy of the China Aerospace Science Technology Corporation ▪ China Carrier Rocket Technology Research Institute ▪ Wanyuan Company	M
419	People's Republic of China	China Aerodynamics Research and Development Center	▪	M
420	People's Republic of China	China National Precision Machinery Import and Export Corporation (CPMIEC)	▪ China Jimm Import and Export Changhai Pudong Corporation ▪ China National Precision Machinery I/E Corp. ▪ China Precision Machinery Import/Export Corporation ▪ CPMIEC Shanghai Pudong Company ▪ Zhongguo Jingmu Jixie Jinchukou Zonggongsi	M
421	People's Republic of China	China North Industries Corporation (NORINCO)	▪ NORIN Optech Co., Ltd.	C, M
422	People's Republic of China	Harbin Institute of Technology (HIT)	▪	M
423	People's Republic of China	Lanzhou Institute of Biological Products	▪ Lanzhou Bioproduct Research Institute	B, C
424	People's Republic of China	LIMMT Economics and Trade Company (LIMMIT)	▪ Ansi Metallurgy Industry Co. Ltd. ▪ Blue Sky Industry Corporation ▪ Dalian Carbon Co. Ltd. ▪ Dalian Sunny Industries ▪ Dalian Sunny Industry & Trade Co., Ltd. ▪ Liaoning Industry & Trade Co., Ltd. ▪ LIMMT (Dalian) Economic and Trade Organization ▪ LIMMT (Dalian) Metallurgy and Minerals Co. ▪ LIMMT (Dalian) Metallurgy and Minerals Co., Ltd. ▪ LIMMT (Dalian FTZ) Metallurgy and Minerals Co., Ltd. ▪ LIMMT (Dalian FTZ) Minmetals and Metallurgy Co., Ltd. ▪ SC (Dalian) Industry & Trade Co., Ltd. ▪ Sino Metallurgy & Minmetals Industry Co., Ltd. ▪ Wealthy Ocean Enterprises Ltd. ▪	M

425	People's Republic of China	Northwestern Polytechnical University	- Northwestern Polytechnic University - Northwest Polytechnic University - Northwest Polytechnical University	M
426	People's Republic of China	Research Institute of Aerospace Special Materials and Technology		M
427	People's Republic of China	Shanghai Academy of Spaceflight Technology (SAST)	8th Research Academy of China Aerospace - Shanghai Astronautics Industry Bureau - Shanghai Bureau of Astronautics (SHBOA) - Shanghai Bureau of Space	M
428	People's Republic of China	Xian Research Institute of Navigation Technology	20th Research Institute of China Electronic technology Group Copr (CETC) - CETC 20th Research Institute	M
429	State of Israel	Ben-Gurion University (of the Negev)		N
430	State of Israel	Nuclear Research Center Negev (NRCN)		N
431	Syrian Arab Republic	Atomic Energy Commission of Syria (AECS)	Syrian Atomic Energy Commission (SAEC)	B, C, N
432	Syrian Arab Republic	Business Lab		M, N
433	Syrian Arab Republic	Damascus University		B, C, M, N
434	Syrian Arab Republic	Electronics Institute		M
435	Syrian Arab Republic	Handasieh	General Organization for Engineering Industries	M
436	Syrian Arab Republic	Higher Institute of Applied Science and Technology (HIAST)	- Institut des Sciences Appliquess et de Technologie (ISAT) - Institut Superieur des Sciences Appliquees et de technologie (ISSAT)	B, M, N
437	Syrian Arab Republic	Industrial Establishment of Defense (IED)	- Industrial Establishment of Defense (IED) - Etablissements Industriels de la Defense (EID) - Etablissement Industriel de la Defence (ETINDE)	M
438	Syrian Arab Republic	Industrial Solutions		M
439	Syrian Arab Republic	Mechanical Construction Factory (MCF)		M, N
440	Syrian Arab Republic	National Standards and Calibration Laboratory (NSCL)	- National Calibration Centre - Scientific Studies and Research Center (SSRC)-NSCL - Institut National Calibration Centre	M
441	Syrian Arab Republic	Scientific Studies and Research Center (SSRC)	- Center for Scientific Studies and Research (SSRC) - Scientific Studies Research	B, C, M

			- Center (SSRC) ▪ Centre d' Etudes et de Recherches Scientifiques (CERS) ▪ Center for Study and Research (CERS) ▪ Scientific Studies and Research Council ▪ Syrain Scientific Research Council ▪ Scientific Research Council (SRC)	
442	Syrian Arab Republic	Syrian Arab Company for Electronic Industries	▪ SYRONICS	M
443	Syrian Arab Republic	University of Aleppo	▪ Aleppo University	C, M
444	Taiwan	Global Interface Company Inc.	▪ (formerly known as) Trans Scientific Corp.	B, C, M, N
445	Taiwan	Trans Merits Co. Ltd.	▪	B, C, M, N
446	United Arab Emirates	International General Resourcing FZE	▪	M
447	United Arab Emirates	Modern technologies FZC (MTFZC)	▪	N
448	United Arab Emirates	Qualitest FZE	▪	N
449	United Arab Emirates	Safa Nicu	▪ Safa Nicu Sepahan ▪ Safanco Company ▪ Safa Al-Noor Company ▪ Safa Nicu Ltd Company	N

Legend:

Types of WMD	
B	Biological
C	Chemical
M	Missile
N	Nuclear