Decree of the Ministry of Industry and Trade of 12 April 1994

89/DECREE

of the Ministry of Industry and Trade
of 12th April 1994
whereby some of the stipulations of the Act no.38/1994 of the Collection of Acts, on the foreign trade in military matériel and on the law 455/1991 of the Collection of Acts, on the Trades and Crafts (Trades Act), as per wording of subsequent regulations, and of the Act. no. 140/1961 of the Collection of Acts, Penal Act, as per subsequent regulations, are executed.

The Ministry of Industry and Trade stipulates, according to the article 33 of the Act no.38/1994 Coll., on the foreign trade with military matériel, and of amendment of the Act no. 455/1991 Coll., on Trades and crafts activities (Trades act, as per wording of subsequent regulations, and of the Act no. 140/1961 Coll., Penal Act, as per subsequent regulations (hereinafter the "Act"), in the agreement with the Ministry of Foreign Affairs, Ministry of Defence and Ministry of Interior:

Article 1
The list of military matériel as per article 5, para. 4 of the Act is listed in Appendix no. 1 of this Decree.

Article 2
The important military matériel according to article 20 para. 4 of the Act is listed in Appendix no. 2 of this Decree.

Article 3
The sample of application for permission to trade in the military matériel as per article 9 para. 5 of the Act is listed in Appendix no. 3 of this Decree.

Article 4
The sample of application for the trading licence as per article 15 para. 4 of the Act is listed in Appendix no. 4 of this Decree.

Article 5
The decree is valid beginning with the day of declaration.

The Minister:
Ing. Dlouhy, CSc.

1. Appendix No. 1 - List of military matériel (LMM)
2. Appendix No. 2 - Important military matériel
3. Appendix No. 3 - Application for permit to undertake foreign trade with military matériel
4. Appendix No. 4 - Application for granting the export/import licence for military matériel

Appendix No. 1 to the Decree No. 89/1994 Coll.

List of military matériel (LMM).

LMM 1
Firearms and their specially designed (dedicated) parts

a) rifles, carbines, revolvers, pistols, automatic pistols, submachine guns and machine guns, with exception of arms manufactured before 1890 and of their replicas
b) arms with smooth bore especially designed for military use
c) arms using cartridgeless ammunition

Technical note:

Among the arms with smooth bore especially designed for military use [listed in sub-item b) above] are those that:

a) are tested to pressures over 1300 bar and
b) routinely and safely operate at pressures over 1000 bar and
c) that may use ammunition longer than 76.2 mm (i.e. cal. 12)

Parameters as per this technical note must be measured according to the CIP (Commission internationale permanente) standards.

- Notes:
  The following arms and their parts do not belong to the item above:

1. arms not capable of fully automatic fire and complying with the following further conditions:
a) arms with rifled bore, especially designed for sport shooting, as defined by the regulations of the UIT (International Shooting Federation)
b) arms with rifled bore barrel, especially designed for hunting purposes, with magazine of maximum 5 rounds capacity
c) multibarrel hunting arms with one or more rifled-bore barrels and at least one smooth-bore barrel

2. arms with smooth bore used for hunting and sports purposes. These arms must not be especially designed or modified for military use or of fully automatic type.
3. firearms especially designed for training ammunition, not capable to fire live ammunition.
4. arms not using centre-fire ammunition that are not of fully automatic type
5.revolvers, pistols that are not of fully automatic type and whose parts intended for retail sale in the destination country

LMM 2
Large-calibre armament or weapons and projectors and their especially designed parts

a) guns, howitzers, cannon, mortars, tank hunters, projectile launchers, military flame-throwers, recoilless guns
b) military smoke, gas and pyrotechnic projectors and generators

Note: this sub item does not include signal pistols.

LMM 3
Ammunition and its especially designed parts for the weapons listed under items LMM 1, LMM 2 and LMM 23, respectively.

Notes:

1. as the especially designed parts the following is understood:

a) metal or plastic products such as initiation fuses, ball bowls, ammunition belt links, rotating bands and metal parts of ammunition
b) safe and arming devices, fuses, sensors and connectors of the explosive bridge
c) sources of single high-power actuating action
d) combustible cartridges
e) parts of ammunition including case ammunition and guided projectiles, excluding parts of ammunition with lead core only

2. the ammunition and its parts that are destined for arms falling under notes 1 to 5 of the LMM 1, do not belong to this item

LMM 4
Bombs, torpedoes, rockets and missiles and their specifically designed parts

a) bombs, torpedoes, grenades (including smoke grenades), smoke canisters, rockets, mines, missiles, depth charges, incendiary bombs and military demolition charges, equipment and sets, pyrotechnic light-signalling devices for military use, cartridges and simulators.
b) instruments and equipment specifically designed for handling, controlling, activating, driven by a single actuating action, ejection, laying,extraction, removal, detonation or detection of items listed under sub-item a)

Note: This item includes also following:
a) mobile gas-liquefying equipment, designed specifically for military use and capable to produce 1000 kg or more of liquid gas per day
b) floating electrically conductive cables suitable for magnetic mine

interception
c) tactical missile rocket nozzles and strategic reentry nose cones and the fine-grained synthetic graphite thereof, that has all of the following parameters:

1. specific density of 1.79 or more (measured at 293 K)
2. breaking tensile strength 0.7 % and more (measured at 293 K)
3. thermal expansion coefficient 2.75 x 10^6 or less
per 1 Kelvin (within the 293 - 1255 K band)

d) military fuel thickeners, including compounds (like octal) or mixtures of such compounds (like napalm) specifically formulated to create materials, that, added to oil products, create incendiary material of a gel-like consistency for use in bombs, projectiles, flame-throwers or other implements of war.

LMM 5
Systems and subsystems of fire control specifically designed for military use, the dedicated parts and accessories thereof

a) fire control devices, sighting, night vision, tracking and homing of missiles and target observation devices
b) range-finders, position finders, altimeters, sight instruments, detection, recognition or identification devices and integrated sensor devices
c) electronic, electrooptic, gyroscopic, acoustic and optical aiming or sighting devices
d) bomb sights, sighting devices, bombing computers, artillery sights and periscopes

LMM 6
Vehicles specifically designed or modified for military use and their specifically designed parts.

Technical note:
For the purposes of this item the term "specifically modified for military use" is understood as a structural, electrical or mechanical change that brings with it an exchange of a component by at least one component, designed specifically for military use, or, by addition of at least one of such component.

a) tanks and self-propelled guns
b) armed and/or armoured vehicles or vehicles equipped with devices for installation of arms
c) armoured railway trains
d) semi-tracked vehicles
e) recovery vehicles
f) gun carries and tractors specifically designed for towing artillery equipment
g) ammunition trailers
h) amphibious and fordable vehicles

i) mobile repair workshops, specifically designed for repairs of military matÈriel
j) all other vehicles specifically designed or modified for military use

Notes:

1. As the parts designed or modified specifically for military matÈriel the following items are also understood:
a) tyres designed in a special way as to make them bullet-proof or being capable to be used even if rendered empty (flat), excluding the agricultural and horticultural tractors and agricultural equipment
b) engines for powering the vehicles as specified under sub-items a) to j), designed or modified specifically for military use, including specifically designed parts therefor
c) tyre inflation control systems, controlled from the cabin of a moving vehicle designed or modified specifically for military use
d) large deflection suspensions designed or modified specifically for military use

2. as the vehicles as understood under sub-item j) also the heavy tank- and heavy artillery transporters, amphibious tracked cargo carriers and high-speed tractors

LMM 7
Toxicologic agents, tear gas, related equipment, parts, materials and technology

a) biological agents, chemical agents or radioactive materials adapted for warfare so that they are to cause casualties in humans, animals or natural products
b) "tear gases" and "riot control agents" are understood also

1. bromobenzylcyanide (CR)
2. chlorobenzylidenemalonitrile (chlorobenzalmalonitrile) (CS)
3. phenylacylchloride (w-chloroacetophenone) (CN)

c) devices designed and intended specifically for dissemination of the materials listed under sub-item a)
d) devices and equipment designed and intended specifically to protect against materials as under the sub-item a) and for the detection and identification thereof
e) parts designed specifically for devices listed under sub-item c) and/or d)
f) "biopolymers" processed or designed specifically to detect and identify the chemical warfare agents listed under sub-item a) and the cultures of specific cells capable of producing these
g) "biocatalysts" for decontamination and destruction of chemical warfare agents and biological systems

1. "biocatalysts" created specifically for decontamination and rendering harmless of chemical warfare agents listed under sub-item a), that result of a direct laboratory selection or of genetic modification of biological systems
2. the following biological systems: the "expression vectors", viruses or cell cultures containing genetic information specific for production of "biocatalyst" as per sub-item g) of point 1.

- h) the following technologies:

1. technologies for development, production and use of toxicologic means, appropriate equipment and parts listed in sub-items a) to e)
2. technologies for development, production and use of "biopolymers" and cultures of specific cells listed under sub-item f)
3. technologies serving exclusively for introducing of "biocatalysts" as per sub-item g) of the point 1 to the substances of military carriers or military matÈriel

Notes:
1. the sub-item a) includes also the 0-ethyl-2-diisopropyl-aminoethyl methylphosphonite (QL) or methylphosphonyldifluoride (DF)
2. the sub-item d) includes also the equipment for air treatment, designed or modified specifically for nuclear, biological and chemical filtration
3. under the sub-item a) the following does not belong:

a) cyanochloride
b) hydrocyanide acid
c) chlorine
d) chloride of carbonyl (phosgene)
e) diphosgene (trichlormethyl chloroformate)
f) ethylbromoacetate
g) xylylbromide
h) benzylbromide
i) benzyliodide
j) bromoacetone
k) cyanobromide
l) bromomethylethylketone
m) chloracetone
n) ethyliodoacetate
o) iodoacetone
p) chlorpicrine

4. under the sub-item d) does not belong

a) personal dosimeters to measure radiation
b) protective masks against specific industrial hazards such as vapours, smokes or dust in the mine, quarry or chemical plants, or
c) gas masks designed for civil use

5. under the sub-item f) do not belong the technologies and cell and microbiological cultures for civil purposes, such as agriculture, pharmacy, medicine, veterinary activities, environmental protection and foodstuffs industry

6. under sub-items h) of the point 3 and g) of the point 2 do not belong the technologies and biological systems for civil purposes, such as agriculture, pharmacy, medicine, veterinary activities, environmental protection, waste management and foodstuffs industry

7. under the sub-item b) does not belong the tear gas that is to be sold in retail in the destination country

LMM 8
Military explosives and fuels and "additives", "precursors" and "stabilizers" therefor

a) "military explosives"
b) "military propellants"
c) "military pyrotechnics"
d) military high-energy solid or liquid fuels including aircraft fuels of special composition for military purposes

- Note: it is understood that under this sub-item belong only the finished products and not their components

Notes:
1. "military explosives", "military propellants" and "military pyrotechnics " include substances and mixtures containing:

a) spherical aluminium powder of particle size of 60 micrometers or less, produced of material with aluminium content of 99 % or more (as regards the technology to achieve sphericity and uniform particle size, refer to category 1.E.1 of the Decree no. 50/1992 Coll., as worded in Decree no. 505/1992 Coll., hereinafter "Appendix to the Decree no. 505/1992 Coll.)
b) metal fuels of particle size less than 60 spherical micrometers, be it spherical, atomized, spheroidal flake-shaped or ground, made of material containing 99% or more of zirconium, boron, magnesium and the alloys thereof, of beryllium or powdered iron of average particle size 3 micrometres or less, produced by reduction of iron oxide with hydrogen.
c) perchlorates, chlorates and chromates in a compound with powdered metal or other highly energetic fuel components

d) nitroguanidine (NQ)
e) compounds containing fluorine and one or more of the following elements: other halogens, oxygen, nitrogen
f) carboranes, decarboranes, pentaboranes and their derivatives
g) cyclotetramethylenetetranitramine (HMX), octahydro- 1.3.5.7-tetranitro-1.3.5.7.-tetrazine,1.3.5.7- tetranitro-1.3.5.7-tetrazacyclooctane (Octogene)
h) hexanitrostilbene
i) diaminotrinitrobenzene (DATB)
j) triaminotrinitrobenzene (TATB)
k) triaminoguanidinenitrate (TAGN)
l) any explosive with detonation velocity exceeding 8700 m/s or detonation pressure exceeding 34 GPa
m) other organic high explosives not specified in these notes, giving detonation pressure 25 GPa and more and stable at temperatures 250 deg C and higher for a period of 5 minutes or longer.
n) titanium-subhydride at stoichiometry TiH 0.65 to 1.68
o) dinitroglycoluril (DNGU, DINGU), tetranitroglycoluril (TNGU, SORGUYL)
p) any other solid propellant of the UN 1.1, not listed in these notes, possessing theoretical specific impulse (under standard conditions) of more than 250 sec for compounds with no metal contents and more than 270 seconds for compounds with aluminium contents
q) any other solid propellant of the UN 1.3 class with theoretical specific impulse of mor than 230 seconds non-halogenized, 250 seconds non-metallized and 266 seconds for matallized compounds
r) tetranitrodibenzotriazotetrazapentalene (2.4.8.10- tetranitrodibenzo-1.3a.4.6a-tetrazapentalene) (TACOT)
s) diaminohexanitrodiphenyl (DIPAM)
t) dipicrylaminodinitropyridine (PYX)
u) 3-nitro-1.2.4-triazole-5-one (NTO or ONTA)
v) hydrazine in concentrations 70 % and higher, hydrazine nitrate, hydrazine perchlorates, unsymmetric dimethylhydrazine, monomethylhydrazine, symmetric dimethylhydrazine
w) ammonium perchlorate
x) cyclotrimethylenetrinitramine (RDX), cyclonite, T4, hexahydro-1.3.5-trinitro-1.3.5-triazine, 1.3.5-trinitro- 1.3.5-triazacyclohexane (hexogene)
y) hydroxylammonium nitrate, hydroxylammonium perchlorate (HAN, HAP)
z) any gun propellants, not listed in these notes, possessing a coefficient of given force more than 1200 kJ/kg
aa) any other explosives, propellants or pyrotechnic not listed in these notes, capable of keeping sustained linear speed of combustion higher than 38 mm per second at standard conditions of 68.9 bar pressure and 21 deg. Centigrade temperature
bb) elastomere-modified cast double-based propellants (EMCDB) of extensibility at maximum stress of more than 5 % at -40 deg. Centigrade
cc) chemical used for propulsive loads:
1. propellant subsatnces: hydroxyl-terminated polybutadiene (HTPB) with ferocene additives, such as butacene, having the following characteristics:

hydroxy index (Meq/g) less than 0.77
viscosity less than 47
functionality of OH less than 2.16
2. polymeric substances: hydroxyl-terminated polybutadiene (HTPB) having the following charakteristics:

hydroxy index (Meq/g) less than 0.77
viscosity less than 47
functionality of OH less than 2.16

3. all high-yield fuels, like boron mixtures, capable of releasing energy equal to or greater than 40 x 10^6 J/kg
4. fuels or semi-finished propellants for ramjets or rocket-ramjets

2. to the "additives" belong :

a) polyglycidylazide (GAP) and its derivatives
b) polycyanodifluoroaminoethyleneoxyde (PCDE)
c) butanetrioltrinitrate (BTTN)
d) bis-2-fluoro-2.2-dinitroethylformal (FEFO)
e) butadienenitrileoxyde (BNO)
f) catocene, N-butyl-ferrocene and other ferrocene derivatives
g) bis (2.2-dinitropropyl) formal and acetal
h) 3-nitraza-1.5-pentanediisocyanate
i) energetic monomers, plasticisers and polymers containing nitro, azido, nitraza, nitrate or difluoroamino groups
j) 1.2.3-Tris [1.2-bis (difluoramino) etoxy]propane, tris vinoxy propane adduct (TVOPA)
k) bisazidomethyloxetane and its polymers
l) bischloromethyloxetane
m) polynitroorthocarbonates
n) tetraethylenepentaminoakrylonitrile (TEPAN), cyanoethylized polyamine
o) tetraethylenepentaminoakrylonitrilglycidol (TEPANOL), cyanoethylized polyamine adduced with glycidol
p) polyfunctional arizidine-amides with isophtalic, trimesic BITA or trimethyladipic carrying structure and 2-methyl or 2-ethyl substitution on the aziridine ring
q) basic salicylate of copper, salicylate of lead
r) lead beta resorcylate
s) lead stannate, lead maleate, lead citrate
t) tris-1-(2methyl) aziridinyl phosphin oxyde (MAPO) and its derivatives
u) organometallic coupling agents, namely:
neopentyl (diallyl)oxy, tri(dioctyl) phosphatetitanate [titanium 2-propenolate-methyl,butanolate,tris(dioctyl) phosphate-0], LICA 12, titanium IV, [2-propenolate-1) methyl, N-propanolatemethyl] butanolate-1, tris (dioctyl), phosphate KR 3538, titanium IV /(2-propenolato-1) methyl, N-propanolatemethyl/ butanolate-1, tris (dioctyl) phosphate, KR 3512

3."precursors" include the following:

a) guanindine nitrate
b) 1.2.4 trihydroxybutane (1.2.4 - butantriol)
c) 1.3.5 trichlorbenzene
d) polynitroorthocarbonates
e) bischloromethyloxethane
f) alcohol-activated poly (epichlorhydrine), poly (epichlorhydrindiol) with molecular weight less than 10.000
g) propylimine
4. under this item do not belong those "precursors" that are industrial chemicals, also those that are not controlled according to other lists and also those that are readily available at the international market
5. "stabilizers" include N-methyl-p-nitroaniline
6. to this item do not belong the following substances, unless compounded or mixed with other"military explosives" or powdered metals:

a) ammonium picrate
b) black powder
c) hexanitrodifenylamine
d) difluoramine (HNF_2)
e) nitrated starch
f) pottassium nitrate
g) tetranitronaphthalene
h) trinitroanisol
i) trinitronaphthalene
j) trinitroxylene
k) fuming nitric acid
l) trinitrophenylmethylnitramine (tetryl)
m) acetylene
n) propane
o) liquid oxygen
p) hydrogen peroxide at concentrations lower than 85 %
q) misch metal
r) N-pyrrolidinone, 1-methyl-2-pyrrolidinone
s) dioctylmaleate
t) ethylhexylacrylate
u) triethylaluminium (TEA), thimethylaluminium (TMA) and other pyrophoric metallic alkyls and aryls of lithium, natrium, magnesium, zinc and boron
v) nitrocellulose
w) nitroglycerine (or glyceroltrinitrate, trinitroglycerine)
x) 2.4.6-nitrotoluene (TNT)
y) ethylenediaminedinitrate (EDDN)
z) pentaerythritoltetranitrate (PETN)
aa) lead azide, normal and basic lead styphnate and primary explosives or primary compositions containing azides or azide complexes
bb) triethyleneglycoldinitrate (TEGDN)
cc) 2.4.6-trinitroresorcinol (styphnic acid)
dd) diethyldiphenylurea, dimethyldiphenylurea, methylethyldiphenylurea
ee) N,N-diphenylurea (assymetric diphenylurea)
ff) methyl-N,N-diphenylurea (assymetric methyldiphenylurea)
gg) ethyl-N,N-diphenylurea (assymetric ethyldiphenylurea)

hh) 2-nitrodiphenylamine (2-NDPA)
ii) 4-nitrodiphenylamine (4-NDPA)
jj) 2.2-dinitropropanole

LMM 9
Vessels of war and special naval devices and the specifically designed parts thereof

a) combatant vessels or vessels (surface or underwater) specifically designed or modified for offensive or defensive activities, be they or be they not modified for non-military activities, regardless of the current state of repair, operational conditions, and hulls or parts of hulls of these ships and vessels
b) engines:
1.Diesel engines specifically designed for submarines, possessing these two characteristics
a) output of 1.12 MW (1500 HP) and
b) 700 RPM or more

- 2.electric motors specifically designed for submarines, possessing all of these following characteristics:

a) output over 0.75 MW (1000 HP)
b) quick reversing
c) liquid cooled and
d) totally enclosed

3. non-magnetic Diesel engines specifically designed for military purposes with power output of 37.3 kW (50 HP) and more,

- Note: the engine is considered as a specifically designed for military purposes, provided that:

a) it has non-magnetic parts other than the crankshaft, block, head, pistons, covers, end plates, valve facings, gaskets and fuel, lubrication and other supply lines, or
b) its non-magnetic contents is greater than 75 % of its total mass
c) underwater detection devices designed specifically for military purposes and the devices for their control
d) submarine and torpedo nets
e) compasses and their equipment and the ship direction indicators specifically designed for submarines
f) inertial navigation devices for ships, including submarines, with navigational error equal to or lesser than 0.8 naval mile (50 % probability of angular error) in the first three hours following the calibration of the gyrocompass
g) hull penetrators and connectors specifically designed for military purposes, enabling cooperation with the devices outside of the vessel

h) silent bearings designed specifically for military purposes and the equipment containing such bearings

LMM 10
Aircraft and helicopters, unmanned air vehicles, aero engines and aircraft or helicopter equipment and the associated equipment and components specifically designed for military purposes

a) combat aircraft helicopters and other aircraft and helicopters specifically designed for military purposes including military reconnaissance, assault, military training, logistic support; as well as all aircraft and helicopters possessing special design features such as multiple hatches, special doors, ramps and reinforced floors, designed for transport and dropping of troops, military equipment and matÈriel and their specifically designed parts.
b) aircraft engines specifically designed or modified for aircraft and helicopters as under sub-item a) and their specifically designed parts.
c) unmanned air vehicles, including remotely piloted air vehicles and independent programmed air vehicles specifically designed or modified for military purposes, their launching devices, ground support equipment, including the command and control equipment
d) airborne devices, including devices for aerial refueling, designed specifically for use with aircraft, helicopters and aero engines as listed under sub-items a) and b), and their specifically designed parts
e) pressure refuelers and the pressure refueling devices, devices designed to enable to operate in confined areas and the ground equipment developed specifically for aircraft and helicopters as per sub-item a) or the aero engine as per sub-item b)
f) pressure breathing equipment and partial pressurized suits used in aircraft and helicopters, anti-g suits, military crash helmets and protective masks, liquid oxygen converters as used in aircraft, helicopters and missiles, the ejection-seat initiating devices and cartridges used for emergency escape from aircraft and helicopters
g) parachutes used by personnel, also parachutes intended for dropping cargo and for air deceleration:
1. parachutes for
a) pin point dropping of rangers
b) dropping of paratroopers

- 2. cargo parachutes
  3. paragliders, (towed parachutes, drogue parachutes for stabilization and attitude control of dropping bodies, such as recovery capsules, ejection seats, bombs)
  4. drogue parachutes for use with ejection seat systems for deployment and inflation sequence regulation of emergency parachutes
  5. recovery parachutes for guided missiles, remotely controlled unmanned aircraft and spacecraft

6. approach parachutes and landing deceleration parachutes
7. other military parachutes

- h) automatic pilot systems for parachute loads, devices specifically designed or modified for military purposes to control opening of a parachute at any height, including oxygen devices

LMM 11
Electronic devices designed specifically for military use and their dedicated parts

Note:
That item includes also:

- a) transmitting, receiving, jamming and jamming-suppression devices, including the electronic countermeasures and electronic counter-countermeasures devices (such as apparatus for introducing of external or deceptive signals into the radar or radio communication receivers, or devices that in any other way limit reception, operation or effectiveness of any electronic receivers of the enemy, including of his countermeasures devices)
  b) frequency-agile tubes
  c) electronic systems or devices designed either for detection and monitoring of electromagnetic spectrum for the security purposes, as well as for military intelligence purposes or for interception of such detection and monitoring
  d) underwater countermeasures devices including the acoustic and magnetic jamming and deception; devices for introduction of external or deceptive signals into sonar receivers
  e) security devices for data processing, security devices for data protection, transmit and signalling lines using digital processes
  f) identification, authentication and reading devices for key processing.

LMM 12
Photographic and electrooptical imaging devices and the parts designed specifically therefor

a) cameras for aerial reconnaissance and the related devices designed specifically for military use
b) film processing machines and printing machines designed for military purposes
c) other cameras and electrooptical imaging devices including the infrared and imaging radar sensors, be it recording or data link-transmitting, designed for military purposes (including reconnaissance)
d) specialized devices for cameras and electrooptical imaging devices listed sub item c), designed so that the recorded or transmitted information would be militarily usable

- Note: the specialized devices listed sub d), related to the electrooptical imaging devices and radar imaging sensors include also the digital

image processing or recognition and the temporary recording screens (see also the LMM 15)

LMM 13
Special armoured materials

a) armoured plate
b) combinations and constructions of metallic and non-metallic materials created especially so that they would provide ballistic protection to military systems
c) military helmets
d) military garments protected by armour and aircrew protective garments with armour protection and the specifically designed parts therefor

Note: the sub-item b) includes the combination of metallic and non-metallic materials designed specifically so that they would make-up an explosive reactive armour

LMM 14
Special devices for military training or for simulation of military situations and specifically designed parts and accessories to these devices

Notes:

- 1. The term "special devices for military training" includes military types of attack trainers, operational flight trainers, radar target trainers and generators, artillery training devices, anti submarine warfare trainers, flight simulators (including of centrifuges for pilot and cosmonaut training) radar trainers, flight instruments trainers, navigation trainers, target devices, drone aircraft, armament trainers, trainers of unmanned aircraft and mobile training units
  2. this item includes also the systems for synthetic imaging for simulators provided they are specifically designed or modified for military purposes

LMM 15
Military infrared devices, thermal imaging and image intensifying devices and parts designed specifically therefor (cf categories 6A02a2 and 6A02b - appendix to the Decree no. 505/1992 Coll.)

Notes:

- 1. This item includes infrared jamming and counter-jamming devices, (i.e. apparatus designed to introduce external or deceptive signals to systems of infrared-seeking missiles, infrared observation systems , thermal imaging devices and infrared communication, links or by other methods limiting operation or effectveness of military infrared systems) including their countermeasures devices

2. Term "parts designed specifically" includes the following, provided it is specifically designed for military use:

a) electrooptical transducer devices for infrared light
b) image intensifier tubes
c) microchannel plates
d) low-light-level TV camera tubes
e) infrared detector arrays
f) pyroelectric TV camera tubes
g) cryogenic coolers used in military thermal imaging systems

LMM 16
Forgings, castings and semi-finished products specifically designed for products listed under LMM 1, LMM 2, LMM 3 LMM 4 LMM 6 or LMM 10 of this list, if they concern artillery matÈriel, machine guns and small arms

LMM 17
Miscellaneous devices and materials and the specifically designed parts therefor

a) equipment for diving and devices for underwater swimming

1. closed and semi-closed-circuit breathing apparatus
2. specifically designed parts used to convert the open-circuit apparatus for military use
3. products designed exclusively for military use with independent diving and underwater swimming devices

b) fire arms silencers
c) electric searchlights and their control units designed for military use
d) construction equipment produced according to military specifications, designed specifically for air transport
e) outer fittings, coatings and treatments aimed at suppression of acoustic, radar, infrared and other emissions, specifically designed for military use
f) field machinery designed specifically for use in combat zone
g) "robots", their controls and end-effectors possessing some of the following characteristics:

1. designed specifically for military purposes
2. equipped with devices protecting the hydraulic lines from puncture from outside, caused by ballistic fragments (i.e. containing self-sealing lines) and designed for utilization of hydraulic fluids with a flash point higher than 566 ^{o}C
3. capable of operation at altitudes higher than 30 000 m or

4. specifically designed or destined for operation under the electromagnetic pulse environment

LMM 18

Equipment and technology for "production" of products listed in this list

a) specifically designed or modified "production" facilities for products and their specifically designed parts, listed in this list
b) specifically designed test facilities and the certification, classification and testing devices designed specifically for them, serving for testing of the products listed in this list
c) specific "production" technology, despite the fact that the device for which this technology is going to be used is not listed in this list
d) technology specific to design, assembly of parts and operation, maintenance and repairs of the complete "production" facilities, albeit the parts are not listed in this list

Notes:
1. the sub-item a) includes also the following equipment
a) nitrators: continuos types
b) centrifugal test apparatus or devices possessing any of the following characteristics:
1. powered by motor(s) of total calculated output exceeding 298 kW (400 HP)
2. capable to carry a usable load of 113 kgs and more
3. capable of producing of centrifugal acceleration of 8 g¥s or more with usable load of 91 kgs or more

c) dehydrating presses
d) extruding presses for small arms, guns and rocket propellant
e) cutting machines for sizing of propellants manufactured by extrusion
f) tumblers of 1.85 m and larger in diameter and having capacity over 227 kg (500 lb) and more
g) continuous mixers for solid propellants

- 2.

a) term "products listed in this list" includes also:
1. products not listed if their concentration is less than listed:
a) hydrazine (see note 1 sub LMM 8)
b) "military explosives" (see item LMM 8)

2. unlisted products if they are under the listed limit, i.e. "superconductor" materials not checked as per 1C05 - appendix to Decree no 505/1992 Coll., superconductor elektromagnets not checked as per 3A01e3 - appendix to the Decree no 505/1992 Coll., superconductor electric devices not listed under item LMM 19, sub-item b)

  - b) term " products listed in this list" excludes:

1. signal pistols (see item LMM 2 sub-item b)
2. tyres for tractors and agricultural equipment (see Note 1, item LMM 6)
3. materials as per Note 3. of the item LMM 7

4. personal dosimeters to measure radiation and the protective masks against specific industrial hazards (Note 4, item LMM 7)
5. acetylene, propane, liquid oxygen, difluoramine, fuming nitric acid, powdered potassium nitrate (Note 6, LMM 8)
6. facilities equipped with machines not listed in this list, such as coating machines non listed anywhere and machines for casting of plastic materials
7. antique small arms dated before 1890 and their replicas (the technologies and facilities for manufacture of non-antique small arms do belong into this list despite being used for manufacture of replicas of the antique small arms)

3. Sub-item d) does not include technologies for civil purposes such as agriculture, pharmacy, medicine, veterinary, environment and foodstuffs industry (Note 5 of the LMM 7)

LMM 19

"Cryogenic" and "superconductive" devices and their specifically designed parts

a) devices designed specifically or assembled for installation in vehicles for land, sea, air or space military uses,capable of operation under motion and producing or maintaining temperatures below -170 ^{o}C

Note: this sub-item includes not only mobile systems, where the accessories and parts made of non-metallic or non-electrical conductive materials are included or used, such as plastic materials, epoxy-resin-impregnated materials etc.

b) "supraconductive" electrical devices (rotary machines and transformers), especially designed or assembled for installation in vehicles for land, sea, air or space military uses, capable of operation under motion, with exception direct-current hybrid homopolar generators with single-pole normal metal armatures, rotating in the magnetic field produced by supraconductive coils, provided that these coils are the only supraconductive parts of the generators

LMM 20

The electrically triggered shutters of a photochromic or electrooptic type, having a closure speed lower than 100 microseconds, with exception of shutters, which are substantial parts of high-speed cameras

LMM 21

Systems of directed energy weapons and their specifically designed parts

a) "laser" systems designed specifically to destruct or to deflect the target
b) particle beam systems capable to destruct or to deflect the target
c) high-power radio frequency systems capable to destruct or to deflect the target
d) specifically designed parts of the systems as listed in sub-items a), b) or c) include also:
1. primary power-generating, energy storage, switching, power output control, fuel handling devices
2. target searching and tracking sub-systems
3. target damage, destruction or near-miss assessment subsystems
4. devices for beam handling, propagation and pointing
5. devices capable of quick retargeting on fast multi-target missions
6. adaptive optics

7. hydrogen negative ion injectors offering more than average injection currents higher than 50 mA with the beam brightness (defined as the current divided by the product of orthogonal transversion, normalized by a square root of the square median emission) higher than 40 A/(cm^2x $mrad^2$) at the kinetic energy 20 keV, or
8. specifically designed parts for the devices listed under items 1 to 7

e) devices specifically designed for detection of and identification of, as well as defence against the systems listed in sub-items a). b)or c) and their specifically designed parts
f) physical test models and appropriate documentation for the systems, devices and parts listed in sub-items a) to e) (as far as the parameters of lasers and appropriate laser components - see category 6A05 - appendix to the Decree no. 505/1992 Coll.)

Note:
Directed energy weapons listed under this item include systems, whose capabilities are derived from the controlled use of:
1. lasers with the continuous or pulse output sufficient to cause destruction similar to effects of conventional ammunition
2. particle accelerators that project beams of charged or neutral particles with destructive force
3. transmitters of high pulse- or median output radio frequency beams that create a sufficiently dense field, capable to disable electronic systems of distant targets

LMM 22
Software

a) "software" specifically designed or modified for "development", "production" or "use" of devices or materials listed in this list
b) specific "software"
1. software specifically designed for:
a) modelling, simulation or evaluation of military weapon systems
b) development, monitoring, maintenance or upgrading of "software" built into the military weapon systems
c) modelling or simulation of military operational situations different than those listed under item LMM 14
d) command, communication, control and intelligence (C^3I) applications

2. "software" for evaluation of effects of conventional, nuclear, chemical and biological weapons

LMM 23
Kinetic energy weapon systems, associated devices, and the parts specifically designed for them

a) kinetic energy weapons systems designed specifically to destruct or to deflect the target
b) specifically designed test and evaluation facilities and test models, including the diagnostic instrumentation and the targets, for dynamic test of kinetic energy projectiles and systems
c) specifically designed subsystems for systems listed under sub-item a) or b), including:

1. launching and propulsion subsystems capable of acceleration of mass larger than 0.1 g to speeds higher than 1.6 km/s in single or rapid fire modes
2. primary power-generating, energy storage, thermal management, conditioning, switching, and fuel handling devices
3. target search and track, fire control and damage assessment sub-systems
4. subsystems for targeting, guidance and divert propulsion (lateral acceleration) of projectiles

Notes:
1. weapon systems using the sub-calibre ammunition and using chemical propellant exclusively, belong to the items LMM 1, LMM 2 or LMM 3, as far as the ammunition is concerned
2. sub-item c) point 2 does not include technologies of magnetic induction for permanent propulsion of civil transport equipment
3. this item includes the systems using some of the propulsion methods listed below:
a) electromagnetic
b) electrothermal
c) plasma
d) light gas or
e) chemical (if used together with some of the above mentioned methods)

LMM 24

Services provided or accepted in relation to the products listed in this list.

This item includes carrying out of repairs and modifications of military matériel, provision of information, sending and receiving of specialists with a purpose to research, develop, design, manufacture, modify, repair, maintain, use and control the military matériel.

General technological comment

As the technology is here in this list understood the technology usable for "development","production", and "use" of products listed in this list. That applies also to "technologies" specific for including or "use" of parts in products included in this list, despite the parts themselves are not listed in the list.

"Technology" mentioned above remains restricted even when applicable to the "development", "production", and "use" of products nonlisted in this list.

The technology as understood by this list is not the "technology" that represents the minimum necessary for installation, operation, maintenance (checks) and repairs of products, whose export was permitted.

- Definition

additives - substances used in explosive compounds for improving their properties
antibodies - see antiidiotypic antibodies, monoclonal antibodies, polyclonal antibodies
antiidiotypic antibodies - antibodies, attached to specific locations, connecting the antigene of other antibodies
biocatalysts - enzymes or other biological compounds that attach to and accelerate destruction of chemical warfare agents

Note: Enzymes are biocatalysts for specific chemical or biochemical reactions

biopolymeres - the following biological macromolecules:

a) enzymes
b) antibodies - monoclonal, polyclonal, antiidiotypic
c) especially designed or created receptors
Note: enzymes are the biocatalysts for specific chemical or biochmical reactions
expression vectors - carriers (i.e. plasmides and viruses) used for introduction of genetic material into host cells
military explosives - solid, liquid or gaseous substances or mixtures of substances that whose purpose is to explode when used in the initiation, relay or main charges in warheads, demolition devices or in other military uses
military propellants - solid, liquid or gaseous substances or mixtures of substances which, if ignited, burn or deflagrate, producing sufficient amounts of gases to execute the work necessary to throw projectiles or missiles or generating gases for propulsion of auxiliary devices of military matÈriel.;under conditions of use the deflagration must not reach the degree of explosion
military pyrotechnics - mixtures of solid or liquid fuels and oxidizers which, if ignited, undergo an energetic chemical reaction in a controlled extent with the purpose to generate specific timing intervals or amounts of heat, noise, smoke, visible light or infrared radiation. The pyrophoric means are a sub-group of pyrotechnic means that lack oxidizers and that are ignited upon contact with air (atmospheric oxygen).
monoclonal antibodies - proteins that attach to one antigenic location and are produced by a cell monoclone
polyclonal antibodies - a mixture of proteines that attach to a specific antigene and are produced by more than a cell monoclone
precursors - special chemicals that are used during manufacture of explosives
production - includes design, proving, production, testing and checking (LMM 18 only)
receptors - biological macromolecular structures capable of connecting ligands that influence physiological functions
riot control agents - substances causing temporary irritation or paralyzing of physiological functions, whose effects cease within several minutes after ending of their application. No serious risk of permanent injury exists, the medical care is seldom required
robots - see appendix to the Decree no. 505/1992, Coll.
stabilizers - substances used in explosive compounds to increase their life
supraconductive - see appendix to the Decree no. 505/1992, Coll.
tear gases - gases causing temporary irritation or paralyzing , whose effects ceases within several minutes after ending of their application
development - see appendix to the Decree no. 505/1992, Coll.
production - see appendix to the Decree no. 505/1992, Coll.
use - see appendix to the Decree no. 505/1992, Coll.
technology - see appendix to the Decree no. 505/1992, Coll.
technical data - see appendix to the Decree no. 505/1992, Coll.

technical help - see appendix to the Decree no. 505/1992, Coll.

Appendix No. 2 to the Decree No. 89/1994 Coll.

Important military matériel

1. Rocket technology
rockets and missiles and the launchers, undercarriages and carriers for them

2. Ground military technology
tanks, self-propelled artillery and armed armoured vehicles

3. Aircraft technology
aircraft, helicopters and other air vehicles designed or modified specifically for military purposes

4. Large calibre armament
cannon, howitzers, mortars, mine-throwers, rocket launchers

5. Large-calibre ammunition (100 mm calibre and more)
ammunition for cannon, howitzers, mortars, mine-throwers, and rocket launchers

6. Firearms
in case of exports exceeding the numbers necessary for arming of an organic unit of batallion size or its equivalent for about 400 persons (submachine guns, rifles, machine guns, antiarmour and antiaircraft weapons)

7. Vessels of war

8. Special reconnaissance, communication and relay technology with scramblers

9. Technical help
licences, results of research and development, special patents related to military matÈriel as per items 1 to 8

Appendix No. 3 to the Decree No. 89/1994 Coll.

Application for permit to undertake foreign trade with military matériel

A) Applicant data

Business name
Seat
Telephone/fax
B) Members of the statutory organs

Name
place of permanent residence
birth number
way of representing the legal person

In case the founders, establishers or founding members are physical persons:
name
place of permanent residence
birth number

Chief clerk:
name
place of permanent residence
birth number
way of representing the legal person

C) Business identification number (if allotted)
D) Subject of business
E) Specifications of the military matériel

Territorial orientation

Required period of validity of the permit

Appendices (specification of documents as per article 9 subpara 2 of the Act no. 38/1994 Coll.

Date: Signature of authorized person and stamp

Appendix No. 4 to the Decree No. 89/1994 Coll.

Application for granting the export/import licence for military matériel

A) Applicant data

Business name
Seat
Telephone/fax

B) Business identification number
C) Data of the foreign contractual partner

Name
seat
complete address
telephone /telefax

Data of the domestic contractual partner

Business name
seat
complete address
telephone /telefax

D) Number of permit to undertake foreign trade with military matÈriel
E) Number, eventually item or sub-item of the combined nomenclature of the customs tariff
F) Data on the military matÈriel:

name according to the LMM (including the type designation)
quantity
purpose of use

G) Proposed period of validity of licence
H) exporting country/importing country/handling abroad
I) Purpose of export/import, eventually of other handling with the military matÈriel
J) Unit price in KË

Total price in KË

K) End-user data

Name
seat
complete address
telephone /telefax

L) Eventual supplementary notes
Appendices (specification of documents as per ß 15 subpara 3 of the Act no. 38/1994 Coll.
Date: Signature of authorized person and stamp