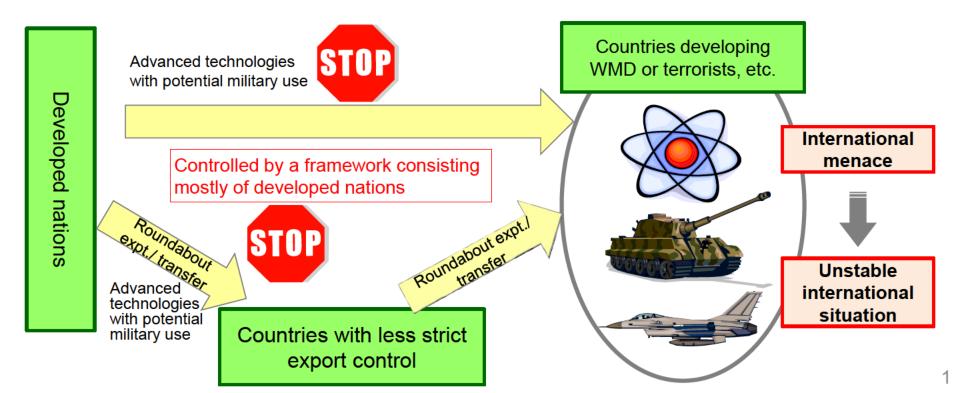


Security Export Control

The Need for Security Export Control

- Security Export Control means to:
 - control transfer of technologies or export of goods
 - in order to prevent transfer of the technologies and goods that can be potentially diverted to weapons or military use
 - by any such person who might conduct activities of concern as a nation or terrorists who could threaten the peace and security of Japan and the international community as a whole
- Since activities of countries of concern and terrorist organizations to acquire technologies are becoming increasingly sophisticated, the significance of the security export control in Japan contributing to preserving the peace and security of Japan and the international community is growing.

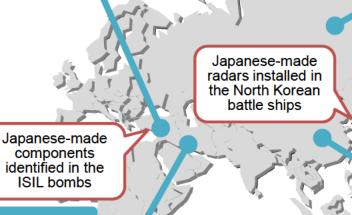


Aggravation of Issues around Security

 In recent years, the security environment is becoming more complicated and aggravated, including frequent random terrorist attacks, multiple missile and nuclear weapons testing by North Korea and increasing military expenditures in Asia.

Middle East

- November 2015: A series of coordinated terrorist attacks by ISIL in Paris, France.
- March 2016: Sequential bombings by terrorists in Brussels, Belgium.
- According to UN Report (Aug. 2016), ISIL allegedly used the mustard gas in Syria in August 2015.



Iran

- January 2016: Exports ban lifted for the transfer of nuclear power and missile related items to Iran.
- In the meantime, Iran conducted the missile testlaunching in mid-March.

Russia

 2014: Backed by the worsening political situation in Ukraine, the cabinet agreement was made for additional measures against Russia including tightened control of weapons export thereto.
 As of now, the economic sanctions against Russia

As of now, the economic sanctions against Russia have not been lifted.

North Korea

- September 2017: Conducted the sixth nuclear bomb testing.
- November 2017: Conducted the third intercontinental ballistic missile (ICBM) launch.

China

- The publicly disclosed defense spending of China quadrupled over a decade.
- Conducting rapid and massive reclamation activities in the Spratly Islands in South China Sea.

Examples where civilian technologies can be used in military sphere

- With the recent leadership of civilian technologies in innovation as well as movement of diversion of civilian technologies into military use, the significance of appropriately controlling not only goods but also civilian technologies is growing.
- In addition, there are cases where countries of concern or terrorists dispatch researchers and students, representing their increasingly diversified procurement activities that require appropriate control of technologies and goods at businesses, universities and research institutions as well.

Civilian applications

Defense-related applications

Carbon fibers

Light in weight, strong and durable fiber material whose key element is carbon

Active control suspensions

A mechanism to damp vibration by electrically adapting the suspension characteristics



Formula 1 race cars

Golf club shafts,

fishing rods,

tennis rackets



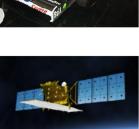
Armored combat vehicles

Main wing material

for fighter jets

Gallium nitride (GaN) semiconductors

Semiconductor material for highly efficient power control/ conversion



Amplifier for a satellite's radiowave transmission

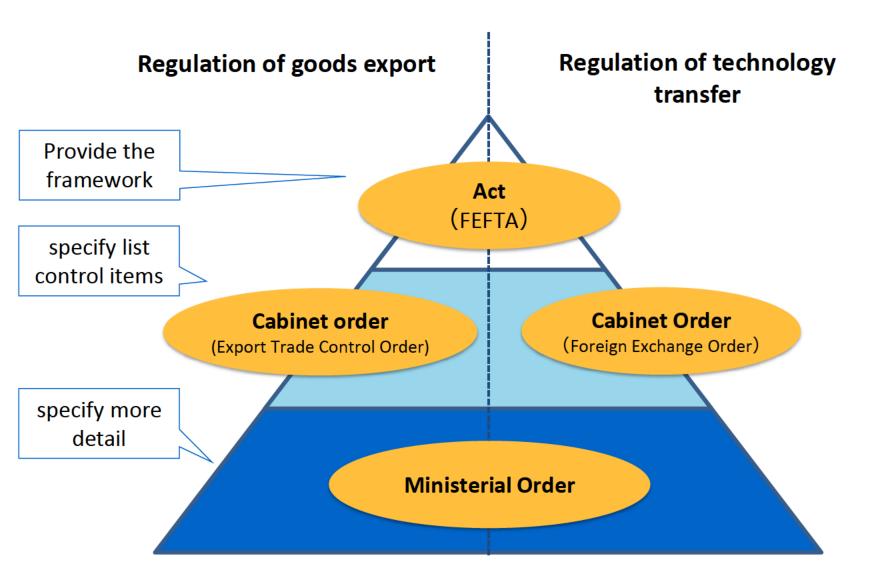


Radars for fleet escort vessels



Basic Legal Structure under FEFTA

FEFTA: Foreign Exchange and Foreign Trade Act



Detailed Legal Structure of FEFTA

• FEFTA also sets forth catch-all control for items which could contribute to WMD related or military end-use activities.

FEFTA	Cabinet Order	List Control	Catch-all control of WMD Catch-all control Weapons			
Article 48	Export Control Order	category 1-15	category 16			
Article 25	Foreign Exchange Order	category 1-15				
		Regulated Items •weapons •listed dual use items related to WMD and conventional weapons	List of Technologies <u>Regulated Items</u> All items or technolo contribute to WMD r end-use activities	-		
6 August 2010	Regulated DestinationRegulated DestinationAll countriesAll countriesAll countriesAll countriespartner list countries					

%As of August, 2019

<u>Preferred Trade Partner List Countries</u> : 26 countries^{*} which are member countries of all export control regimes and have comprehensive export control systems

<u>UN arms embargo countries^{*} in the context of catch-all control:</u> Afghanistan, Central Africa, Democratic Republic of Congo, Iraq, Lebanon, Libya, North Korea, Somalia, Sudan, South Sudan

List control under FEFTA

• Japan's control list is fully consistent with the international regime lists.

	category	List control	International Regime List				
	1	Weapons	WA (Wassenaar Arrangement) / ML (Munitions)				
	2	Dual-use items	NSG (Nuclear Suppliers Group)				
	3		AG (Australia Group) (Biological/Chemical Weapons)				
	3-2						
	4		MTCR (Missile Technology Control Regime)				
	5						
	\sim		WA / BL (Basic List) • SL (Sensitive List)				
	13						
	14	<u>/</u>	WA/ML (excluding item 1)				
L	15	Dual-use items	WA / VSL (Very Sensitive List)				
	16	Catch-all	Catch-all control				

(Ref) The comparative list of Japan's List and EU list:

http://www.cistec.or.jp/service/eu_taihi.xls (Only in Japanese)

Individual License

- Transaction-based examination.
- Check the contents of each transaction.

(Ref) 4 Pillars of examination

- 1. Whether the goods will be actually delivered to the end user.
- 2. Whether the goods will be actually used by the stated end user.
- 3. Whether the goods will not be used for the purposes of impeding the maintenance of international peace and security.
- 4. Whether the end user will appropriately control the goods.

• Bulk License

- > For specific destination and specific items, repeated transaction, etc.
- Do not examine each transaction.
- Check the exporter's compliance (ICPs, etc.).

Individual License and Bulk License-types of bulk license

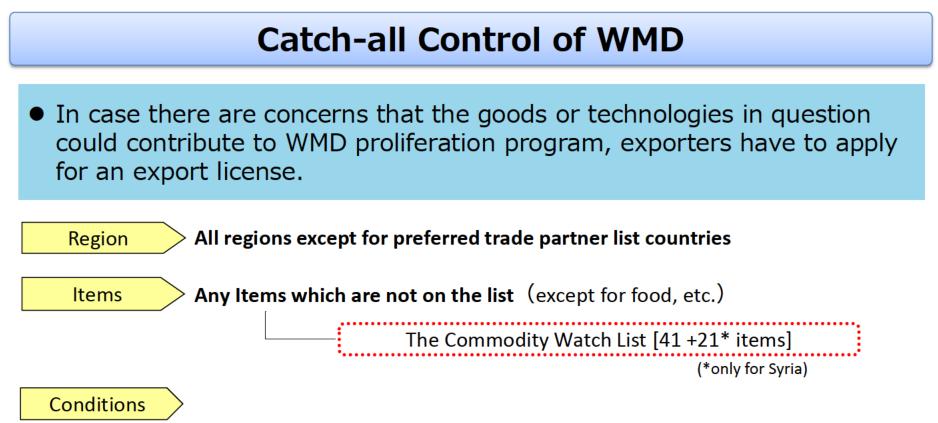
Se Valid for multiple transactions for 3 years
 Export of specific items to preferred trade partner list countries Only electronic application is acceptable. ICPs and prior on-site check are NOT required.
 Exports of specific items to specific countries (i.e. export of WA/BL to non-WA countries, etc.). ICPs and prior on-site check are required.
 Repeated exports of specific items to specific customers. ICPs and prior on-site check are required.
 Re-exports of arms and arms-related items (category 1) to the country of origin for repair or replacement. ICPs and prior on-site check are required.
 Exports of specific items to subsidiaries in foreign countries. ICPs and prior on-site check are required.

List-controlled Items - i. (for reference) *As of January, 2021

Number	ltem	Number	Item	Number	Item	Number	ltem
4	A #### 0	(42)	1. Numerically-controlled machine tools	(45)	Radiation shielding windows or frames	(15)	Structural materials for rockets or UAVs
1.7	Arms	(12)	2. Measurement equipment	(46)	TV cameras or lenses specially designed for protection from the influence of radiation	(16)	Accelerometers or gyroscopes for rockets or UAVs
(1)	Firearms, ammunitions	(13)	Induction furnaces, arc furnaces or melting furnaces	(47)	Tritium	(17)	Flight controllers or attitude controllers, et alia, for rockets or UAVs
(2)	Explosives, explosive dispensers	(14)	Isostatic presses	(48)	Equipment for the production, collection or preservation of tritium	(18)	Avionics equipment
(3)	Propellants, military fuels	(15)	Robots	(49)	Platinized catalysts	(18 - 2)	Thermoelectric batteries for rockets or UAVs
(4)	Propellants, military fuels	(16)	Vibration test systems	(50)	Helium-3	(19)	Gravity meters or gravity gradiometers for aircraft or ship mounting
(5)	Directed-energy weapons	(17)	Structural materials for gas centrifuge rotors	(51)	Primary products of rhenium	(20)	Launch pads or associated ground launch support equipment for rockets or UAVs
(6)	Kinetic energy weapons and projectiles	(18)	Beryllium	(52)	Containers with explosion-proof construction	(21)	Radio telemetry equipment, radio telecontrol equipment for rockets or UAVs
(7)	Military vehicles, bridges, etc.	(19)	Substances used as alpha sources for the detonation of nuclear weapons	3.	Chemical Weapons	(22)	Computers designed for use in a rocket
(8)	Military vessels, etc.	(20)	Boron 10		-	(23)	Analog-to-digital converters for rockets or UAVs
	Military aircraft, etc.	(21)	Substances used as reducing or oxidizing agents for the production of nuclear fuel materials	(1)	Raw materials for chemical warfare agents or substances/raw materials having equivalent toxic	(24)	Vibration test equipment, aerodynamics testing equipment, combustion test equipment, et alia
(10)	Anti-submarine nets, anti-torpedo nets	(22)	Crucibles	(2)	ability with chemical warfare agents Equipmentor device for the production of chemical agents		Electronic computers used for designing
(11)	Armor plates, military helmets, body armors	(23)	Hafnium	(3)	Equipment of device for the production of chemical agents Equipment of components for repair of reactors or containers	(24 - 2)	rockets
(12)	Military searchlights or control equipment	(24)	Lithium	3 -	2. Biological Weapons	(25)	Materials or equipment for reducing the level of the radio waves, acoustic waves or light
(13)	Bacterial/chemical warfare agents	(25)	Tungsten	Ū		(26)	Integrated circuits, detectors, or radomes for rockets or UAVs
(13 - 2)	Chemical compounds for clarifying bacterial/chemical warfare agents	(26) (27)	Zirconium Electrolytic cells for fluorine production	(1) (2)	Source materials for bacterial warfare agents Equipment for the production of bacterial agents	5. A	dvanced Materials
(14)	Biopolymers for chemical agents, etc.	(28)	Equipment for the production of gas centrifuge rotors		liesiles	(1)	Fluorine compound products
(15)	Equipment for the production/test of warfare low explosives	(29)	Centrifugal balancing machines	4.1	Missiles	(2)	(delete)
(16)	Equipment or device for the production of arms	(30)	Filament winding machines	(1)	Rockets or their production equipment	(3)	Aromatic polyimide products
(17)	Military satellites or components thereof	(31)	Laser oscillators	(1-2)	Unmanned aerial vehicles (UAVs) or their production equipment	(4)	Tools for forming of titanium, aluminum or its alloys
2.	Nuclear Power	(32)	Mass spectrometers or ion sources	(2)	Guidance or testing equipment for rockets	(5)	Alloys or powders of titanium or aluminum and their production equipment
		(33)	Pressure gauges or bellows valves	(3)	Propulsion units	(6)	Metallic magnetic materials
(2)	Nuclear fuel or nuclear source materials Nuclear reactors or power-generating equipment	(34) (35)	Superconducting solenoid electromagnets Vacuum pumps	(4) (5)	Flow-forming machines Servo valves, pumps, gas turbines	(7) (8)	Uranium-titanium alloys or tungsten alloys Superconductive materials
	for nuclear reactors Deuterium or deuterium compounds	(35-2)	Scroll-type compressors and vacuum pumps	(5-2)	Bearings for pumps	(9)	(delete)
	Artificial graphite	(36)	Direct current power units	(6)	Propellants or their raw materials	(10)	Lubricants
(5)	Equipment for the separation/reprocessing of nuclear fuel materials	(37)	Electron accelerators or X-ray generators	(7)	Equipment for the production/test of propellants	(11)	Liquids for preventing vibration
	Equipment for the separation of lithium isotopes	(38)	Impact testing machines	(8)	Powder and granular materials mixers	(12)	Liquids for coolant
(7)	Equipment for the separation of uranium/plutonium isotopes	(39)	High speed cameras	(9)	Jet mills or equipment for the production of metal powders	(13)	Ceramic powders
(8)	Frequency changers	(40)	Interferometers, pressure gauges, pressure transducers	(10)	Equipment for the production of composite materials	(14)	Ceramic composites
(9)	Nickel powder, nickel porous metal	(41)	Goods used for the detonation (testing) of nuclear weapons	(11)	Nozzles	(15)	Polydiorgano silane or polysilazane, et alia
(10)	Equipment for the production of deuterium or deuterium compounds	(42)	Photomultiplier tubes	(12)	Equipment, et alia, for the production of nozzle or re-entry vehicle nose tips	(16)	Bismaleimide or aromatic polyamideimide, et alia
(10- 2)	Equipment for the production of uranium/plutonium	(43)	Neutron generators	(13)	Isostatic presses or controllers	(17)	Fluorinated polyimides
(11)	Flow-forming machines	(44)	Remote control manipulators	(14)	Furnaces or controllers for composite materials	(18)	Molded products that use prepregs or preforms
(1)	r rew-reading indennies	(++)		(14)		(19)	Boron, boron carbide, guanidine nitrate

List-controlled Items - ii. (for reference) *As of January, 2021

Number	ltem	Number		Number	ltem	Number	r Item	
			Aluminum, gallium and other organic metallic compounds	(7)	Controllers of optical equipment or components	(1)	Gas turbine engines	
6. M	aterial Processing	(20)	Phosphorus, arsenic and other organic compounds	(7-2)	Aspherical optical elements	(2)	Spacecrafts for satellite or space development use	
(1)	Bearings	(21)	Phosphorus, arsenic or antimony hydrides	(8)	Laser oscillators	(2-2)	Controllers designed for use in satellites	
(2)	Numerically-controlled (N/C) machine tools	(22) (23)	Silicon carbides Polycrystal substrate	(8 - 2)	Laser microphone	(3)	Rocket propulsion systems	
	Machine tools for the production of gears	8. Computers		(9)	Magnetometers, underwater electric field sensors or magnetic field gradiometers, or calibrating	(4)	Unmanned aerial vehicles	
	Isostatic presses			-	equipment thereof	(5)	Testing/production equipment for items 1) through 4), and 10) of 15.	
	Coating devices	(1)	Computers	(9-2) (10)	Underwater monitoring systems Gravity meters or gravity gradiometers			
	Measurement equipment Robots	9. T	elecommunication	(10) (11) (11-2)	Radars Masks and reticles, specially designed for optical sensors	14.	Miscellaneous	
(8)	Feedback devices, et alia	(1)	Telecommunication transmission equipment	(12)	Equipment for measuring optical reflectance, et alia	(1)	Metallic fuel in a powder state	
(9)	Spin-forming machines	(2)	Electronic changers	(13)	Equipment for the manufacture or calibration equipment of gravity meters	(2)	Substances which are additives or precursors to low explosives or high explosives	
7. EI	lectronics	(3)	Communication optical fibers	(14)	Materials, et alia, for optical detectors or components thereof	(3)	Diesel engines	
		(4)	(delete)	11	. Navigation Devices	(4)	(delete)	
(1)	Integrated circuits	(5)	Phased array antennas		. Havigation Devices	(5)	Self-contained diving equipment	
(2)	Devices using microwaves or millimeter waves	(5- 2)	Radio direction finding equipment for monitoring use	(1)	Accelerators	(6)	Civil engineering machinery for air transportation	
	Signal processing equipment	(5- 3)	Wireless communication wiretapping devices	(2)	Gyroscopes	(7)	Robots or control equipment thereof	
(4)	Devices using superconductive materials	<i>(5.4</i>)	Equipment capable of detecting the position of objects by observing interferences of radio waves	(3)	Inertial navigation systems	(8)	(delete)	
	Superconducting electromagnets	(5- 4)	objects by observing interferences of radio waves, possessing a receiving function only	(4)	Gyro-astro compasses, global navigation satellite systems, equipment for receiving radio waves, or	(9)	Tear or sneeze gas and application equipment thereof	
	Primary/secondary or solar cells	(5- 5)	Internet communication monitoring equipment		aircraft altimeters	(10)	Simplified explosion devices	
	High voltage capacitors	(6)	Design/production equipment for items 1) through	(4-2)	Underwater navigation devices using sonar	(11)	Detectors for explosives	
(8)	Encoders	(0)	3), and 5) through 5-5)		5) Testing/production equipment for items 1) through 4-2)		15. Sensitive Items	
(8 - 2)	Thyristor devices or modules	(7)	Encryption equipment			v		
(8-3) (8-4)	Semiconductor devices for power control Optical modulator	(8)	Equipment designed to prevent the leakage of information transmission signals	12.	. Marine	(1)	Molded goods using inorganic fibers, et alia	
	Optical modulator Sampling oscilloscopes	(9)	(delete)	(1)	Submersible vessels/vehicles	(2)	Radio wave absorbers or conductive polymers	
	Analog-to-digital converters	(10)	Communication cable systems capable of detecting surreptitious intrusion	(1)	Vessel components or auxiliaries thereof	(3)	Nuclear heat source materials	
	Digital instrumentation recorders			(3)	Underwater salvage systems	(4)	Digital telecommunication transmission equipment	
	Signal generators	(11)	Design/production/measurement equipment for items 7), 8) or 10)	(4)	Underwater lighting systems	(4)	Units for obstruction of simplified explosion devices	
(13)	Frequency analyzers	40	Sonsore	(5)	Underwater robots	(5)	Underwater acoustic equipment	
(14)	Network analyzers		Sensors	(6)	Sealed power units	(6)	Optical detectors for space use	
(15)	Atomic frequency standards	(1)	Underwater acoustic equipment	(7)	Circulation water tanks	(7)	Radars which utilize a transmitting pulse width	
(15 - 2)	Spray cooling method temperature control devices	(2)	Optical detectors or coolers thereof	(8)	Buoyant materials		less than 100 nanoseconds	
	Semiconductor manufacturing equipment	(3)	Optical fibers for use in sensors	(9)	Closed-circuit or semi-closed circuit self-contained diving equipment	(8)	Submersible boats	
	Masks or reticles Materials for production of masks	(4)	High speed cameras	(10)	Underwater acoustic transmitters used for obstruction	(9)	Soundproofing devices for vessels	
	Semiconductor substrate	(5)	Reflectors	13	Propulsion Units	(10)	Ramjet engines, scramjet engines, combined cycle	
(19)	Resists	(6)	Optical components for space use	10.		(10)	engines 10	



(1) Exporter's Initiative = The "Know" Condition

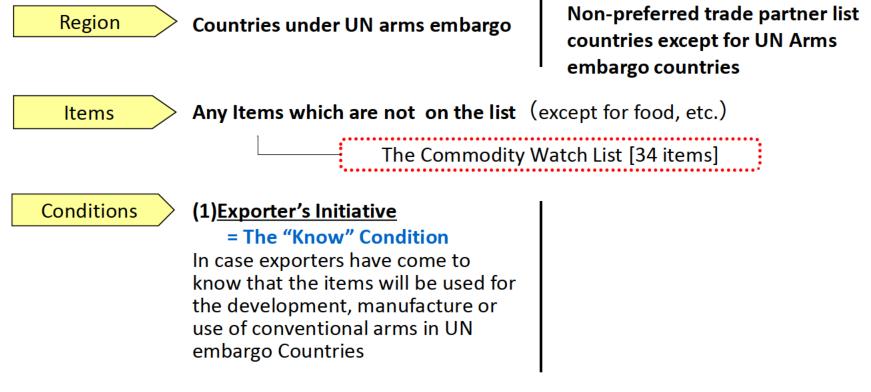
- In case exporters have come to know that the items will be used for the development, manufacture, use, storage etc. of WMD
- In case exporters have come to know that the end user is/was involved in WMDrelated program through relevant documents such as Foreign End User List, except for the case the item in question will be apparently used for a purpose other than the WMD-related activities

(2) <u>METI's</u> Initiative = The "Informed" Condition

• The "inform" is given when METI considers that the items in question are/may be intended for WMD.

Catch-all Control of Conventional Arms

 In case there are concerns that the goods or technologies in question could contribute to military end-use, exporters have to apply for an export license.



(2) <u>METI's</u> Initiative = The "Informed" Condition

The "inform" is given when METI considers that the items in question are/may be intended for a military end-use.

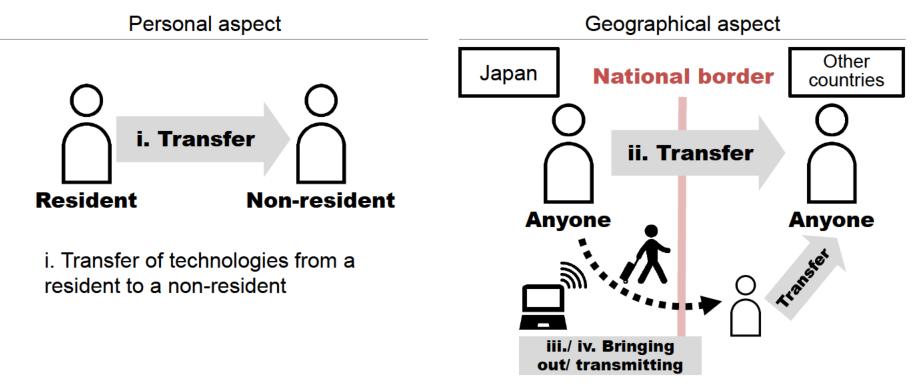
Transfer of Technologies Subject to the Control

Transfer of technologies subject to the controls are:

i. transactions intended for transferring technologies from a resident to a non-resident (personal aspect);

ii. transactions intended for transferring technologies in other countries (geographical aspect);

(As complement for ii.) iii. acts of bringing out technologies overseas; and iv. acts of transmitting technical data in an electric form to other countries.

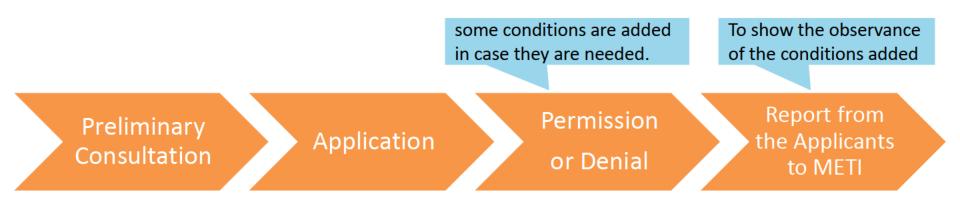


ii. Transfer of technologies in other countries Obtaining a separate license for bringing out technologies is required if a license for 'ii' is not yet obtained.

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Procedure for Individual License Application

- The exporter has the responsibility to classify whether the export item is subject to control list. As a result of the classification, if it is found that the item is covered by the control list, it must apply for export license to the Ministry of Economy, Trade and Industry (METI).
- METI examines the appropriateness of the end-use and the end-user of the license application, and decides whether to permit or deny the application. Additional conditions may be imposed on export licenses (e.g., monitoring of export machines, prior consent in the case of the re-transfer of items.).



Distinguishing Residents and Non-residents

 The definition of resident and non-resident is stipulated by the government notice: About interpretation and implementation of the Foreign Exchange Laws and Regulations (No. 4672, issued on November 29, 1980).

Resident

Japanese

- 1) Those who work at Japan's international diplomatic offices
- 2) All other Japanese than 1), 3), 4) and 5)

Foreigners

- 7) Those who work at an office in Japan
- 8) Those who stay in Japan for six months or longer after entry

Corporations or legal persons

- 12) Offices including a branch/sub-branch of an international corporation in Japan
- 13) Japan's international diplomatic offices
- 14) Japanese corporations/legal persons excluding 13) and 15)

Non-resident

Japanese

- 3) Those who departed from Japan and stay outside Japan for the purpose of working at an overseas office
- 4) Those who departed from Japan and stay outside Japan for the purpose of staying outside Japan for two years or longer
- 5) Those who stay outside Japan after the departure from Japan for two years or longer
- 6) Those who fall under any of 3) through 5) and returned to Japan as a temporary homecoming staying for less than six months so far

Foreigners

- 9) Persons in public service for foreign governments or international institutions
- 10) Diplomats, consuls or accompanying personnel/servants thereof (only those appointed/hired outside Japan)
- 11) All foreigners other than 7) through 10)

Corporations or legal persons

- 15) Offices including a branch/sub-branch of a Japanese corporation in other countries
- 16) Diplomatic offices of foreign governments and international institutions in Japan
- 17) Foreign corporations/legal persons excluding 12) and 16)

Note: The residency status is judged by applying the classification above in the order of the underlined with red -> the underlined with blue -> no underline. Indifferent to the classification above, the US Forces, UN Forces, and consituent members thereof are non-resident.

Penalties under FEFTA

Criminal Penalty

【Individual】

- •No more than ten years of imprisonment
- •No more than thirty million yen or no more than five times in value of the items

[Company]

- •No more than ten years of imprisonment
- •No more than one billion yen or no more than five times in value of the items

Publication

 METI may issue a warning, which would be made public on the METI website

Administrative Penalty

 Prohibition of exports for no more than three years