Classification of Strategic Commodities
Content

• The regulations
• Structure of the regulation
• Categorisation
• Commonly controlled items
• Commonly not controlled items
• General requirement for classification of products
• Demonstrate how to check control status of product in TID’S Website
Legal basis on import and export control

• Cap 60 - Import and Export Ordinance, Laws of Hong Kong
  – Cap 60G - Import and Export (Strategic Commodities) Regulations
  • Schedule 1 - Munitions and Dual-Use Goods List that follow control lists of multilateral regimes
  • Schedule 2 - Transit Goods List (include munitions items, nuclear related items, encryption items, related documents and articles for a use in relation to nuclear, biological and chemical weapons)
Legal basis on import and export control

• Schedule 3 & 4 - End use control in which the chemicals and equipment as specified in Schedule 3 are intended or may be used in activities relating to nuclear, biological or chemical weapons as specified in Schedule 4
Control Lists Origin

- Wassenaar Arrangement
- Missile Technology Control Regime
- Nuclear Suppliers Group
- The Australia Group
- Chemical Weapons Convention
Schedule 1

• Munitions list

• Dual-use goods list
Munitions List

- 22 items (ML1 - ML22)
- Small arms & light weapons (and related ammunition) e.g. pistols, bombs, riot control agents, NBC (nuclear, biological and chemical) weapons, military explosives etc.
- Tanks and other military armed vehicles
- Combat vessels (surface or underwater)
- Armoured/protective Equipment
- Aircraft & Unmanned Airborne Vehicle, Aero Engines & related equipment
Dual-Use Goods List

- Cat 0 - Nuclear Materials, facilities and equipment
- Cat 1 - Material, chemicals, microorganisms and toxins
  – Cat 2 - Materials processing
  – Cat 3 - Electronics
  – Cat 4 - Computers
  – Cat 5 - Telecommunications and information security
  – Cat 6 - Sensors and lasers
  – Cat 7 - Navigation and Avionics
  – Cat 8 - Marine
  – Cat 9 – Aerospace and Propulsion
5 Groupings

A - System, equipment & components
B - Test, inspection & production equipment
C - Materials
D - Software
E - Technology
Control Regimes Identification

000 series - WA
100 series - MTCR
200 series - NSG
300 series - AG
400 series - CWC
Example: 3B001

3  - means Cat 3 - Electronics

B  - means Test, Inspection & Production Equipment

001 - means the WA control list
Examples of Products

Commonly Controlled
Military products

- all types of weapons including guns, ammunitions, bombs, etc
- all military vehicles, vessels, aircraft
- electronic equipment specially designed for military use
- chemical warfare agent, biological toxic agent and radioactive materials adapted for use in war
• energetic materials such as explosives, propellant, pyrotechnics, oxidizers, etc.
• body armour, military helmet and armoured plate
• imaging equipment such as night vision camera, infrared or thermal imaging equipment
Materials, chemicals, micro-organisms and toxins

- aromatic polyimides
- liquid crystal polymer with a heat distortion temperature of neat resin > 250 deg.
- special carbon fibre
- special carbon fibre prepreg
- special carbon fibre yarn, rovings, tow or tape
- virus such as H5N1 and bacteria such as bacillus anthracis
Machines

• high precision machine tools such as turning machine, milling machine, grinding machine and electric discharge machine
• high accuracy dimensional inspection and measuring machine
• special pressure transducers
• special vacuum pumps
Electronics and computers

- radiation hardened ICs and computers
- military graded computers, CPUs, analogue-to-digital (A/D) ICs, digital-to-analogue (D/A) ICs, field programmable logic devices (FPLD), EEPROMs, flash memories and SRAMs
- high performance A/D ICs, D/A ICs and FPLD
• microwave power amplifiers
• radio frequency signal analysers
• frequency synthesised signal generators
• network analysers
• microwave test receivers
• equipment for the manufacturing of semiconductor devices
• digital computers with performance APP (Adjusted Peak Performance) > 0.75 Weighted TeraFLOPs
Telecommunications and encryption products

- radiation hardened and military graded telecommunications equipment
- GSM and 3G base station equipment
- equipment with encryption such as SAN (Storage Area Network), VPN (Virtual Private Network), security router, network infrastructure commodities and software, application switch, security processors, etc
Other products

• Nuclear material such as uranium, thorium and their chemical compounds
• Imaging intensifiers
• night vision goggles
• thermal imaging equipment incorporating infrared focal plane arrays with silicon material
Examples of Products
Commonly Not Controlled
Military products

- air guns
- smooth-bore weapons used for hunting or sporting purposes, but not specially designed for military use or of the fully automatic firing type
- weapons using non-centre fire cased ammunition (e.g. guns of calibre 0.177” or 0.22”)

22
• muskets, rifles and carbines manufactured earlier than 1938
• revolver, pistols and machine guns manufactured earlier than 1890 and their reproductions
• signal pistols
• pure explosive chemicals such as black powder, potassium nitrate, TNT, PETN, etc.
ICs and Electronic Components

• general purpose CPUs, RAM, ROM, microwave power amplifiers with frequency less than 3.2 GHz, modules and controller cards for communications, oscilloscopes, civilian video tape recorders, etc.
Computer Systems

• digital computer systems as follows:
  (i) not designed to exceed threshold on radiation hardened; and
  (ii) not designed to operate below $-45^0\text{C}$ or above $85^0\text{C}$; and
  (iii) computing performance with APP $\leq 0.75$ Weighted TeraFLOPS
Computer Accessories

- printer, mouse, keyboard, scanner, disk drive, CD-ROM, monitor, graphic accelerators, plug-in card, operating system and software with 56 bits cryptographic ability etc.
Telecommunication Equipment

- cordless telephones, public radiotelephones, modem, radiocommunication transceivers, DBS receivers, PABX, keyline systems, fax machines, etc.
Networking Equipment

• routers and bridges for LAN and WAN without encryption, digital multiplexers and statistical multiplexers (bandwidth on demand equipment), server switches, standard optical fiber cables designed for providing public communication services, automatic teller machines, etc.
Encryption products

- products when accompanying their user for the user's personal use

- mass market products that meet all of the following
  - generally available to the public by means of over-the-counter transactions, mail order transactions, electronic transactions; or telephone call transactions
  - cryptography functionality cannot easily be changed by the user
  - designed for installation by the user without substantial support by the supplier; and
  - when necessary, details of the products will be provided to the authority in the exporter's country in order to ascertain compliance with the above conditions
- cryptographic equipment used to perform authentication (all aspects of access control without encryption of data files) or digital signature only
- personalized smart cards
- receiving equipment for radio broadcast embedding encryption feature to perform billing function
- cryptographic equipment for access of copy-protected contents
- cryptographic equipment specially designed and limited for banking use or money transactions
- portable or mobile radiotelephones for civil use that are not capable of end-to-end encryption
- cordless telephone equipment not capable of end-to-end encryption with the maximum effective range < 400 metres
Materials

• Liquid crystal polymer (LCP) having a heat distortion temperature of the neat resin $\leq 250$ deg.

• Polyarylene ether ketones

• Prepreg with phenolic or epoxy resins having a glass transition temperature $< 160$ deg. and a cure temperature lower than the glass transition temperature
Other products

• riot control agents such as tear gases individually packaged for personal self defence
• personal radiation monitoring dosimeters
• body armour or protective garments when accompanying the user for his own personal protection
General Requirement for Classification of Products:

1. Product Catalogue showing technical specification and details
2. ECCN (Export Control Classification Number) provided by manufacturer (for US products)
3. Any export licence from other countries
4. Composition for chemical product (e.g. Material Safety Data Sheet)
5. Questionnaires for the following products (to be completed by manufacturer):

a. SC037 (Cryptography Questionnaire - Classification of Encryption Products)

b. SC049 (Questionnaire for Import/Export Licence Application – Computers)

c. SC051 (Questionnaire for Import/Export Licence Application - Numerically Controlled Machine Tools)

d. SC052 (Classification Questionnaire for Non-fluorinated Polymeric Substances)

e. SC053 (Classification Questionnaire for Fibrous or Filamentary Materials)
• control list is found in the following web-site:

• control status of products may be found in the following web-site:

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