



DIRECTORATE GENERAL OF
CUSTOMS AND EXCISE

presented by:
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Webinar
June 16th, 2021



Strategic Trade Control Enforcement (STCE)

Implementation Guide



Indonesian Customs

Outline

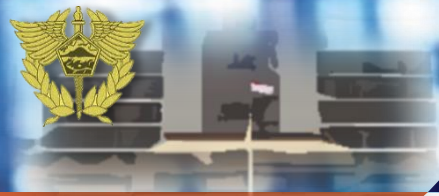
What is STCE?

International Legal Frameworks

Chemical, Biological, and Radioactive Materials

Dual-Use Materials, Dual-Use Equipments

Weapons and Military Equipments



Definition of Strategic Goods

WCO Definition of Strategic Goods

- Strategic goods are weapons of mass destruction (WMD), conventional weapons, and related items involved in the development, production, or use of such weapons and their delivery systems
 - WMD
 - Conventional weapons
 - Related Items

Strategic goods pose a security threat or confer a major military advantage to an adversary



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Weapons of Mass Destruction

- 1 • WMD are weapons that can inflict mass casualties or cause great physical damage.
- WMD include
 - Nuclear weapons
 - Chemical weapons
 - Biological weapons
 - Radiological weapons





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Conventional Weapons

2

- Non-WMD weapons of war such as bombs, shells, rockets, etc.
- The WCO does not include small arms and light weapons (SALW) within the scope of strategic goods.





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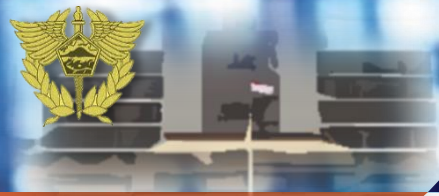
“Related Items”

3

- Strategic goods also include materials and equipment involved in the development, production, or use of WMD, conventional weapons, and delivery systems.
- Many of these items are “dual-use” – they also have legitimate commercial uses. Often they are commonly traded, but subject to a permitting process.



Typically, national trade control laws and regulations will specify items requiring control through licensing or permitting.



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Examples of “Related Items”

3

- Chemicals
- Explosives
- Metals
- Radioactive and nuclear materials
- Industrial machinery and equipment
- Electronics and electrical equipment
- Measuring and test equipment
- Weapons and military equipment

Annex III of the STCE Implementation Guide describes many strategic items in the context of the Harmonized System (HS)



Importance of Strategic Goods

- Protection of society is a vital goal of Customs.
- The United Nations Security Council (through Resolution 1540) has recognized proliferation of WMD and related materials as a threat to international peace and security.
- UNSCR 1540 imposes binding obligations on all States to take and enforce effective measures to regulate trade.
- Customs ensures that international trade complies with laws and regulations.



UNSCR 1540 (in 2004)

- Resolution 1540 imposes binding obligations on all states to take and enforce “effective measures” to prevent proliferation of nuclear, chemical, or biological weapons and their means of delivery, including, inter alia,
 - Export, transit, trans-shipment, and border controls
 - Law enforcement to block illicit trafficking of related materials
- Requires states to act beyond an expression of commitment
 - Legislation, implementation, and enforcement



Role of Customs in UNSCR 1540

- Regarding “materials, equipment, and technology covered by the relevant multilateral treaties and arrangement...”
 - Paragraph 3.c
 - Establish effective border controls and law enforcement efforts to detect, deter, prevent and combat ... the illicit trafficking and brokering in such items...
 - Paragraph 3.d
 - Establish, develop, review and maintain appropriate effective national export and trans-shipment controls over such items...



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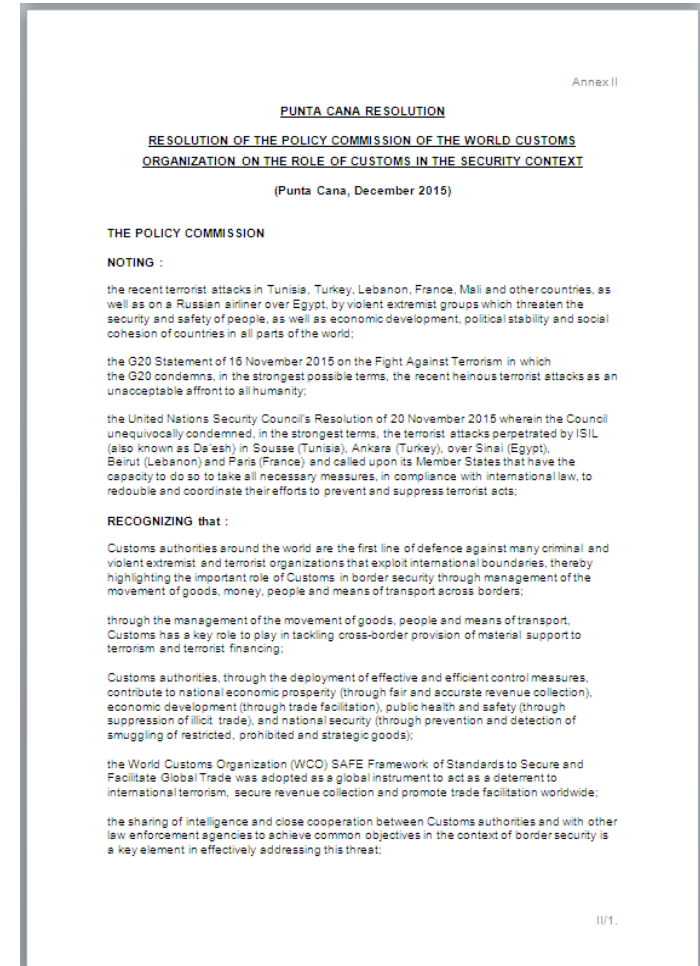
Role of Customs in STCE

Punta Cana Resolution (Dec – 2015)

- In December 2015, the WCO's Policy Commission, its highest body, issued a very significant resolution with respect to the security role of Customs.

'I welcome this Resolution on behalf of the global Customs community and pledge to continue to advocate for increased cooperation at the national and international level between Customs and other border and law enforcement agencies to ensure that Customs Administrations worldwide may function at an optimum level, leveraging all the resources at their disposal, in the fight against terrorism.'

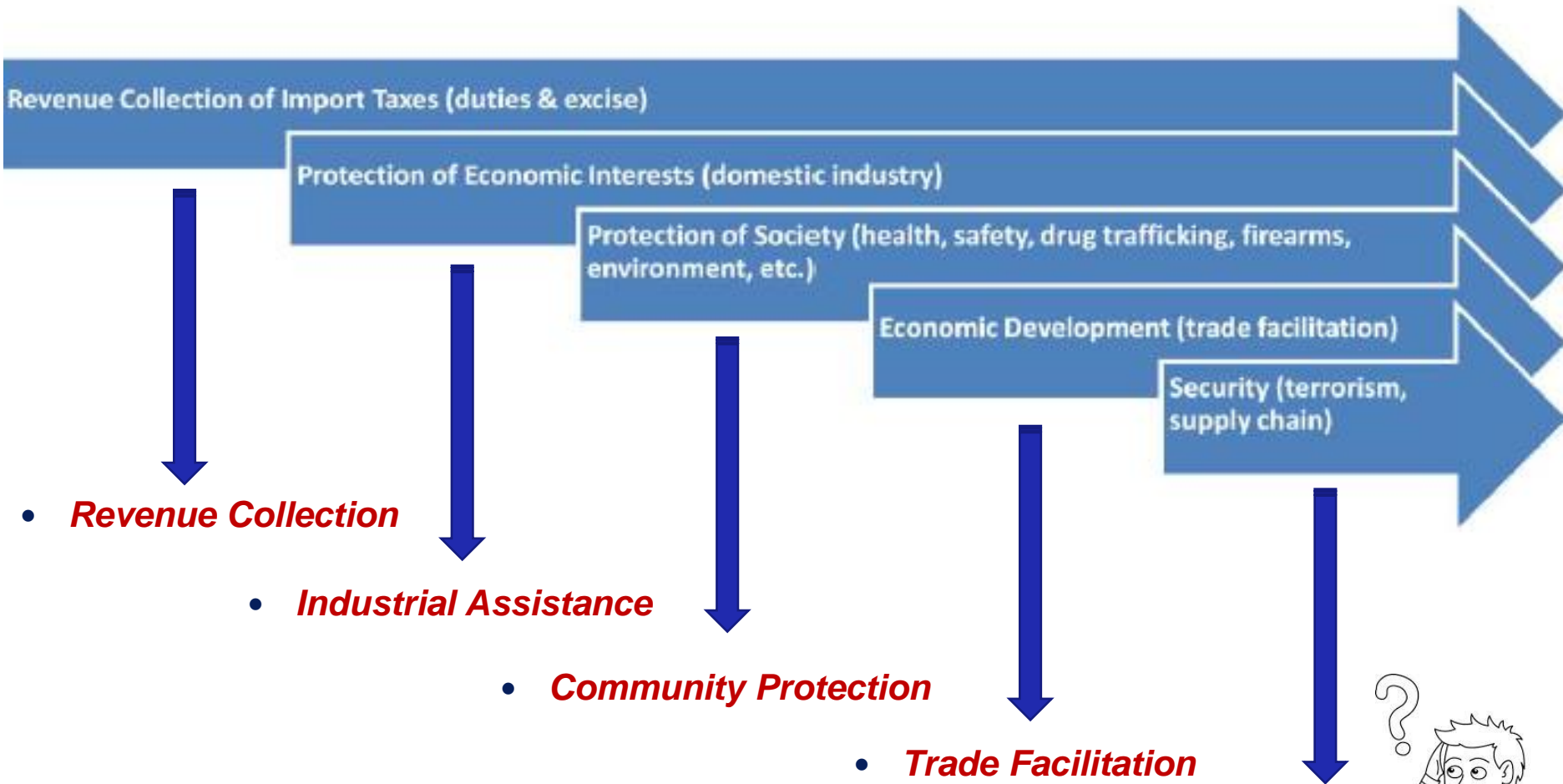
Mr. Kunio Mikuriya
WCO General Secretary



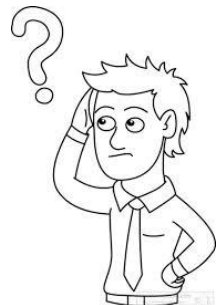


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Evolution of Customs Role



How about your Customs Administration?





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Treaties

NPT:

Treaty on the Non-Proliferation
of Nuclear Weapons

- Commits parties not to provide certain nuclear materials or goods for the processing, use, or production of those materials

CWC:

Chemical Weapons Convention

- Contains specific provisions covering import and export of certain "Scheduled" chemicals
- Requires annual declarations of regarding transfers

BWC:

Biological Weapons Convention

- Requires States Parties to refrain from transferring biological weapons and from assisting, encouraging, or inducing anyone to manufacture them

HCOC:

Hague Code of Conduct against
Ballistic Missile Proliferation

- Calls for restraint in production, testing, and export of ballistic missiles

ATT:

Arms Trade Treaty

- Includes legally binding commitments to establish and maintain national control systems to regulate international trade in conventional weapons, ammunition, and related parts and components.



Multilateral Arrangements

NSG

Nuclear Suppliers Group

- nuclear and nuclear-related dual-use exports

AG

Australia Group

- chemical and biological export guidelines and control lists
- assists adherents in fulfilling their CWC and BWC obligations

MTCR

Missile Technology Control Regime

- unmanned delivery systems capable of delivering WMD

WA

Wassenaar Arrangement

- conventional arms and related dual-use goods and technologies

- Together, the guidelines and control lists of the multilateral export control arrangements constitute the set of international norms and the basis for coordinated national export control efforts.



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Chemicals

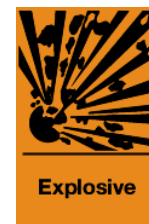
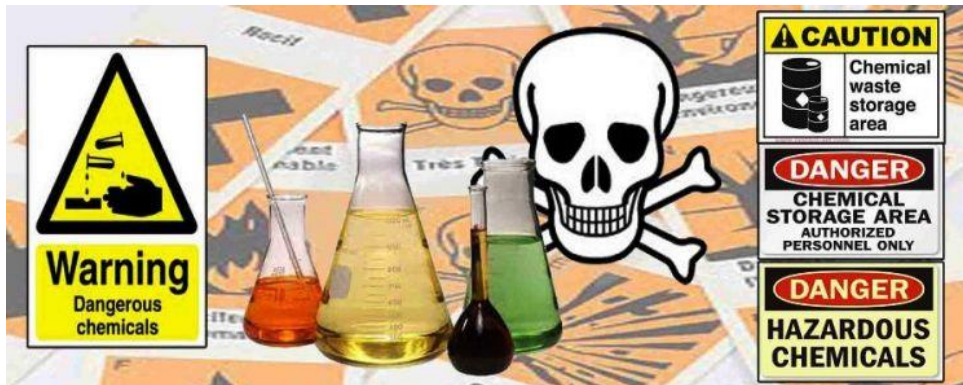


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Customs Control of Chemical Shipments

Three main steps:

1. Recognizing a chemical shipment.
2. Chemical identification.
3. Determining if the chemical might be strategic.



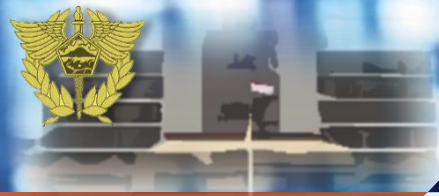


Norms for Labeling and Marking Chemical Shipments

Two key recommendations from the United Nations:

- Globally Harmonized System of Classification and Labeling of Chemicals (GHS) **for individual chemical packaging (*chemical bottles and drums*)**
- UN Recommendations on the Transport of Dangerous Goods (Model Regulations) **for outer packaging (*box full of bottles*) and cargo transport units (*tank trucks and ISO containers*)**

*GHS and Model Regulations have **safe transport** of chemicals as a common goal and promote harmonized communication of hazards*



Marking, Labeling and Placarding

- Packages: Proper shipping name and UN number, with diamond-shaped danger label(s)
- Cargo transport units*: Diamond-shaped placard(s) on exterior surface with UN number displayed
 - Inside placard in white box
 - Adjacent to placard in an orange rectangular panel



**Road transport tanks or freight vehicles, railway transport tanks or freight wagons, multimodal freight containers or portable tanks, or multiple element gas containers (MEGCs)*



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Examples of Proper Labeling, Marking, and Placarding





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Improper Labeling and Packaging



Missing or incomplete labels



Destroyed label



Proper label, unsafe packaging



Documents Associated with Chemical Shipments

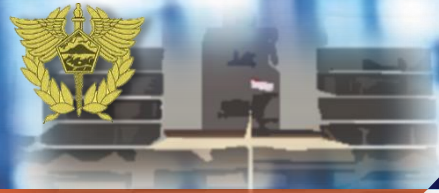
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- Dangerous goods transport documents
- Safety Data Sheets (SDS)
- Product Specification

Marks ,Nos. If applicable, identification or registration number(s) of the Unit	Number and kind of packages, proper shipping name *, IMO hazard class/division, UN number, packaging group (where assigned) **, flashpoint (in °C.c.c.) **, control and emergency temperatures **, identification of the good as MARINE POLLUTANT **, EmS No. and MFAG Table No.***	Gross mass (kg.), net quantity/mass* *

NATURE AND QUANTITY OF DANGEROUS GOODS						
Dangerous Goods Identification				Quantity and type of packing	Packing Inst.	Authorization
UN or ID No.	Proper Shipping Name	Class or Division (Subsidiary Risk)	Pack- ing Group			

- UN number
- Shipping name + technical name
- Hazard information from Dangerous Goods List



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Identifying Strategic Chemicals

- Labels, marking, documentation: information + reduce contact with chemicals
- Technical reach-back





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CAS Registry Numbers (CAS #s, CAS RNs)

CAS = Chemical Abstracts Service
Unique international numeric identifiers

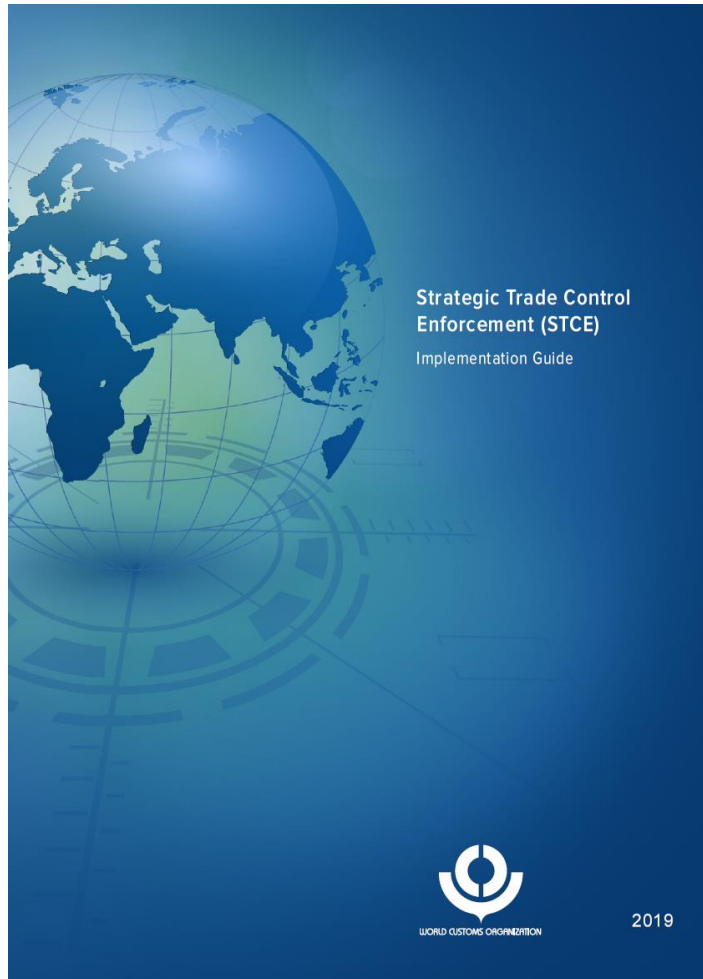




STCE Implementation Guide

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Annex V



Strategic Trade Control
Enforcement (STCE)
Implementation Guide



2019

Annex V – Strategic Chemicals by CAS Registration Number

The list includes a great number of chemicals listed by the CWC, AG, NSG, MTCR, WA, and PGS. The most commonly traded CWC scheduled chemicals, as identified by the OPCW⁸¹, are shown in **bold red text**.

CAS numbers cannot be used as unique identifiers in ALL situations because some forms of listed chemicals have different CAS numbers, and mixtures containing a listed chemical may also have different CAS numbers.

CAS	Chemical
51-75-2	HN2
57-13-6	Urea
57-14-7	Unsymmetrical dimethylhydrazine
57-39-6	MAPO
60-34-4	Monomethylhydrazine
67-64-1	Acetone
74-90-8	Hydrogen cyanide
75-44-5	Phosgene
75-52-5	Nitromethane
75-55-8	Propyleneimine
75-97-8	Pinacolone
76-06-2	Chloropicrin
76-89-1	Methyl benzilate
76-93-7	Benzilic acid
77-81-6	Tabun
78-38-6	Diethyl ethylphosphonate
78-53-5	Amiton
96-64-0	Soman
96-79-7	N,N-Diisopropyl-(beta)-aminoethyl chloride
96-80-0	N,N-Diisopropyl-(beta)-amino-ethanol
100-15-2	N-Methyl-p-nitroaniline
100-35-6	N,N-Diethylaminoethyl-2-chloride
100-37-8	Diethylaminoethanol
100-38-9	2-(N,N-Diethylamino)ethanethiol
102-71-6	Triethanolamine
105-59-9	Methyldiethanolamine
107-07-3	2-Chloroethanol
107-44-8	Sarin
108-02-1	2-(N,N-Dimethylamino)ethanethiol
108-18-9	Diisopropylamine
108-70-3	1,3,5-Trichlorobenzene
111-22-8	Triethylene glycol dinitrate
111-48-8	Thiodiglycol
116-17-6	Triisopropyl phosphite
119-75-5	2-Nitrodiphenylamine
121-45-9	Trimethyl phosphite
121-82-4	RDX
122-52-1	Triethyl phosphite
124-40-3	Dimethylamine
139-87-7	Ethyldiethanolamine
143-33-9	Sodium cyanide
151-50-8	Potassium cyanide
257-07-8	Dibenz-(b,f)-1,4-oxazepine
298-06-6	O,O-Diethyl phosphorodithioate
302-01-2	Hydrazine
376-90-9	PFF-1
382-21-8	PFIB

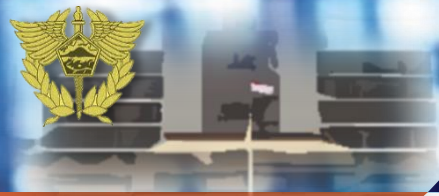
CAS	Chemical
430-78-4	Ethylphosphinyl difluoride
464-07-3	Pinacolyl alcohol
479-45-8	Tetryl
505-60-2	Bis (2-chloroethyl) sulphide
505-71-5	EDNA (Ethylenedinitramine)
506-59-2	Dimethylamine hydrochloride
506-77-4	Cyanogen chloride
506-93-4	Guanidine nitrate
532-27-4	2-Chloro-1-phenylethanone
538-07-8	HN1
540-73-8	Symmetrical dimethyl hydrazine
541-25-3	2-Chlorovinyl-dichloroarsine
555-77-1	HN3
556-88-7	Nitroguanidine
578-94-9	10-Chloro-5,10-dihydrophenarsazine
603-33-8	TPB
637-12-7	Octal
637-39-8	Triethanolamine hydrochloride
676-83-5	Methylphosphinyl dichloride
676-97-1	Methylphosphonyl dichloride
676-98-2	Methylphosphonothioic dichloride
676-99-3	DF
677-43-0	N,N-Dimethylaminophosphoryl dichloride
683-08-9	Diethyl methylphosphonate
693-21-0	Diethylene glycol dinitrate
753-59-3	Methylphosphinyl difluoride
753-98-0	Ethylphosphonyl difluoride
756-79-6	Dimethyl methylphosphonate
762-04-9	Diethyl phosphite
849-29-6	O-(3-chloropropyl) O-[4-nitro-3-(trifluoromethyl)phenyl] methylphosphonothioate
868-85-9	Dimethyl phosphite
869-24-9	N,N-Diethylaminoethyl-2-chloride hydrochloride
932-64-9	NTO
993-13-5	Methylphosphonic acid
993-43-1	Ethylphosphonothioic dichloride
1066-50-8	Ethylphosphonyl dichloride
1271-42-7	Ferrocene carboxylic acid
1271-55-2	Acetyl ferrocene
1273-89-8	Ethyl ferrocene
1273-94-5	1,1'-Diacetyl ferrocene
1273-97-8	Diethyl ferrocene
1274-00-6	Pentyl ferrocene
1274-08-4	Dibutyl ferrocene
1293-87-4	Ferrocenedicarboxylic acid
1304-56-9	Beryllium oxide
1313-82-2	Sodium sulphide
1314-20-1	Thorium oxide
1314-23-4	Zirconium oxide
1314-80-3	Phosphorus pentasulphide
1317-60-8	Superfine iron oxide (Fe2O3)
1333-83-1	Sodium bifluoride
1341-49-7	Ammonium bifluoride
1344-57-6	Uranium dioxide
1344-58-7	Uranium trioxide
1344-59-8	Triuranium octoxide
1445-76-7	Chlorosarin
1498-40-4	Ethylphosphinyl dichloride
1614-08-0	ADHTDN
1619-34-7	3-Quinuclidinol
1630-08-6	DATB

⁸¹ <https://www.opcw.org/resources/declarations/most-traded-scheduled-chemicals-2017>



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Biological Materials



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Strategic Biological Materials

Pathogenic micro-organisms (Infectious agents) and toxins that can be used as biological weapons (BW) in biological warfare.

- Viruses, bacteria, fungi and toxins
- Sources: naturally-occurring, academic, commercial
- Applications: vaccines, treatments, diagnostics, etc.

BW concern: attacks against people, livestock, crops



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Category A Infectious Substances

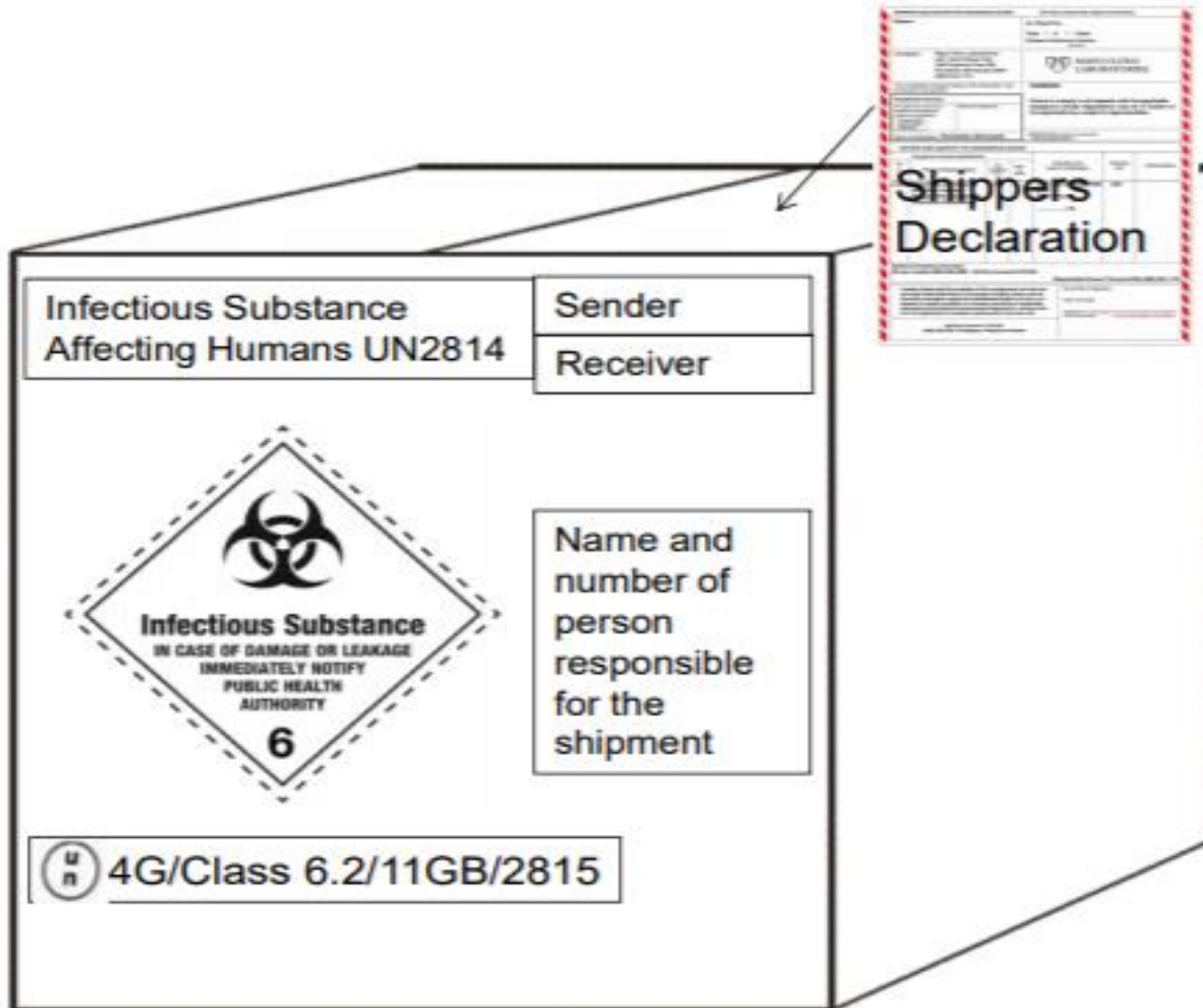
- Permanent disability, life-threatening or fatal disease
- **UN 2814** or **UN 2900** (+ UN 1845 dry ice)
(+ UN 1977 liquid nitrogen)
- < 50 ml or 50 g for passenger aircraft
- < 4 L or 4 kg for cargo aircraft

Proper packaging to minimize risk of exposure



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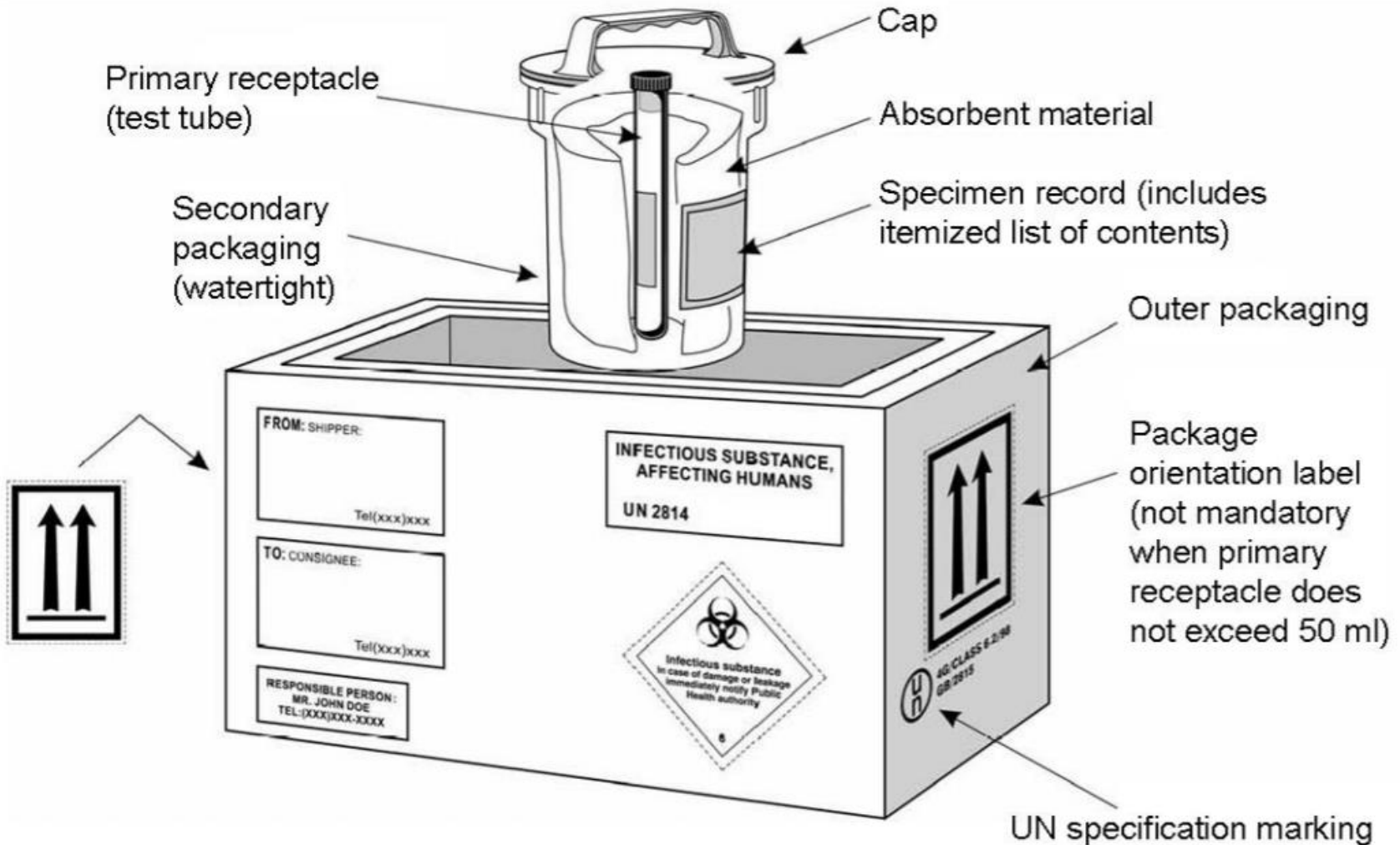
Marking and Labeling Category A Shipments





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Category A Packaging



Use of refrigerants: additional requirements



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Category A Inner Packaging

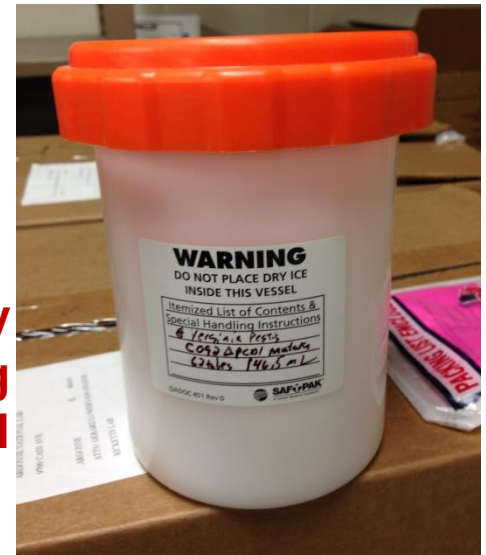


Space for dry ice

Cushioning
& biohazard
symbol



Secondary
packaging
with label





Category A Documentation

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1. Shipper's Declaration for Dangerous Goods (air shipments)
2. Air waybill (air shipments)
3. Packing list/pro-forma invoice
4. List of contents between secondary packaging and outer packaging

SHIPPER'S DECLARATION FOR DANGEROUS GOODS						
Shipper			Air Waybill No. Page of Pages Shipper's Reference Number (optional)			
Consignee			For optional use for Company logo name and address			
Two completed and signed copies of this Declaration must be handed to the operator.			WARNING Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.			
TRANSPORT DETAILS This shipment is within the limitations prescribed for: (delete non-applicable) <input type="checkbox"/> PASSENGER AND CARGO AIRCRAFT <input type="checkbox"/> CARGO AIRCRAFT ONLY			Airport of Departure:		Shipment type (delete non-applicable) <input type="checkbox"/> PASSENGER AIRCRAFT <input type="checkbox"/> CARGO AIRCRAFT ONLY	
Airport of Destination:						
NATURE AND QUANTITY OF DANGEROUS GOODS Dangerous Goods Identification						
UN or ID No.	Proper Shipping Name	Class or Division (Subsidiary Risk)	Packing Group	Quantity and type of packing	Packing Inst.	Authorization
Additional Handling Information						
I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.					Name/Title of Signatory Place and Date Signature (see marking above)	



Category B Infectious Substances

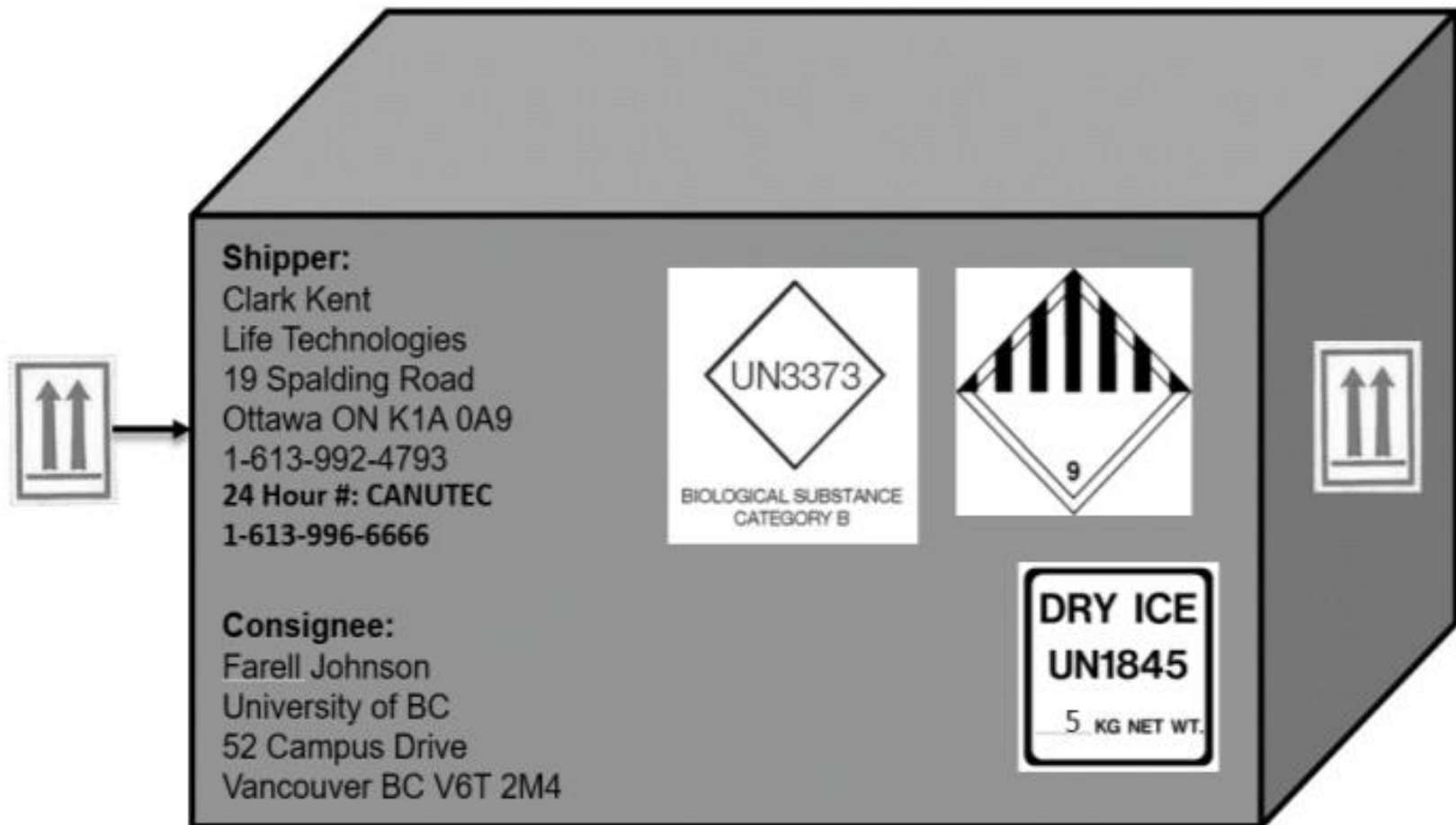
- “an infectious substance which does not meet the criteria for inclusion in Category A”
- **UN 3373** (+ UN 1845 if packed in dry ice)
(+ UN 1977 if packed in liquid nitrogen)
- Air transport:
 - No primary receptacle > 1 L
 - Outer packaging cannot contain > 4 L of liquid or > 4 kg of solid

Less stringent requirements, packages still must be robust



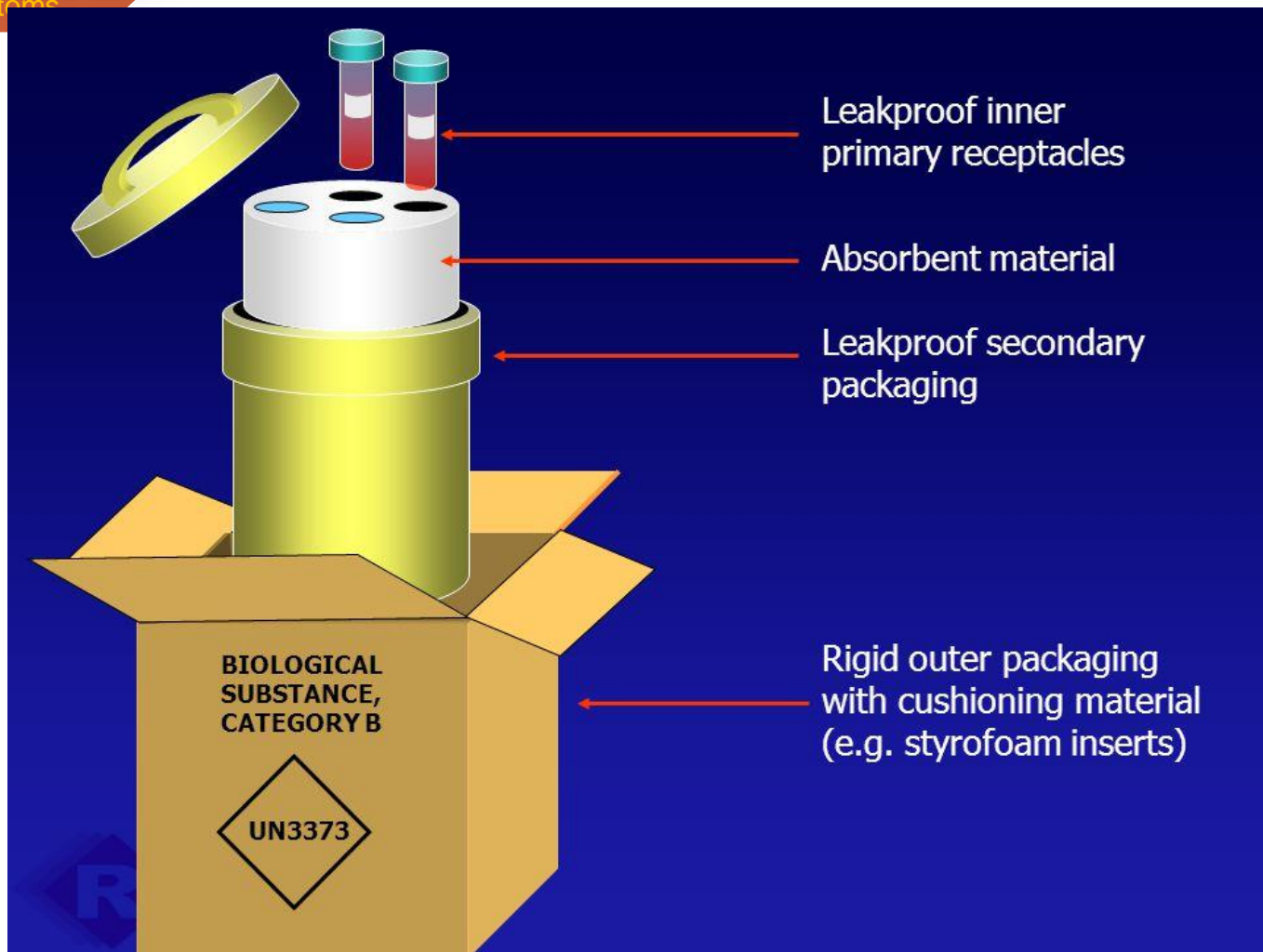
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Marking and Labeling Category B Shipments





Category B Packaging






Technical name **NOT REQUIRED** on outer packaging



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Category B Documentation

- Dangerous goods transport document: not required
- Should have
 - Air waybill (air shipments)
 - Packing list/pro-forma invoice, number of packages, contents, weight, value

  J151215022303uv .L SENDER	Ship Date: 03MAR15 ActWgt: 10.0 LB CAD: 102455575/INET3610	Dims: 7 X 7 X 7 IN
	Delivery Address Bar Code 	
Ref # Invoice # PO # Dept #	UN3373 Biological Substance CategoryB	

Scientific name **NOT REQUIRED** on waybill – see the invoice.



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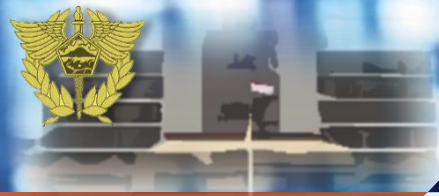
Radioactive Materials



Radioactive Materials

Radioactive materials (RM) emit radiation.

1. **Naturally Occurring Radioactive Material (NORM)**
2. Declared shipments of **medical** or **industrial isotopes** or **nuclear materials**
3. **Contaminated** materials
4. **Smuggled** materials



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NORM - Typical Shipments

NORM-Naturally occurring RM

- Not declared as radioactive materials
- Not a threat, but can present a hazard





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Declared Shipments of R/N Materials

❖ \approx 20 M packages annually.

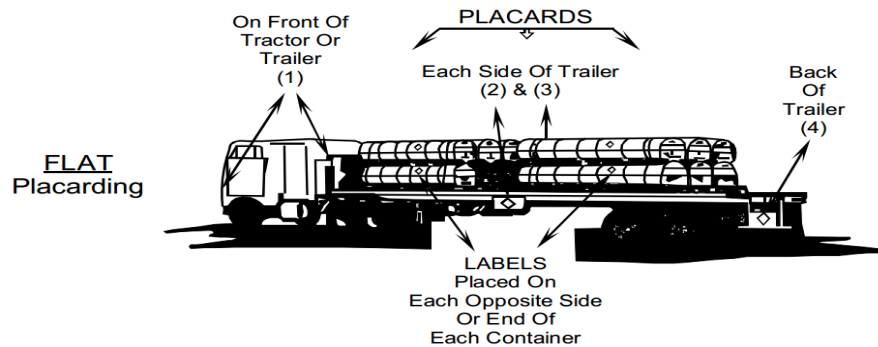
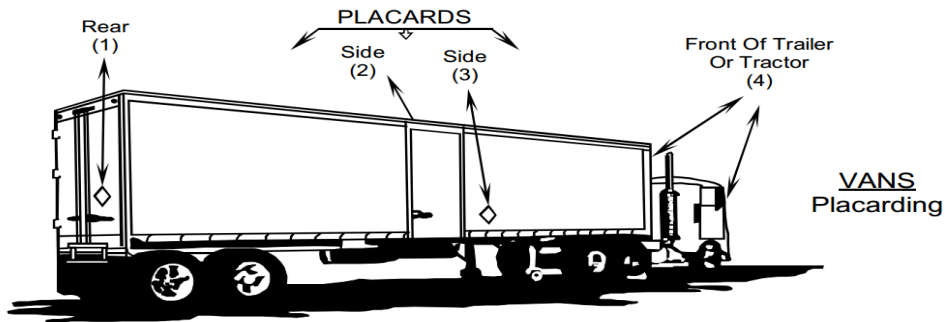
❖ International standards for

- placarding
- packaging
- labeling
- documentation

- IAEA Safety Standards
- ADR



Declared shipments placarding



- **Hazard Class 7**



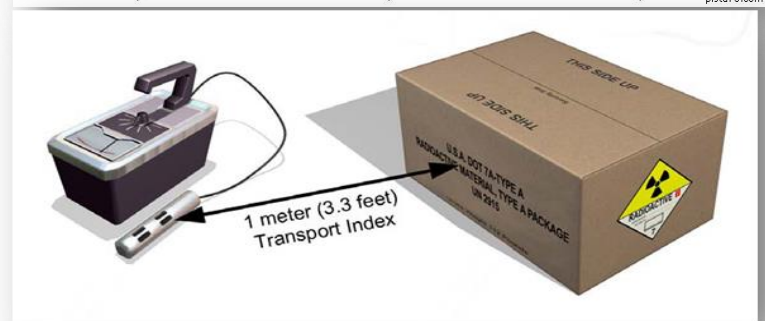
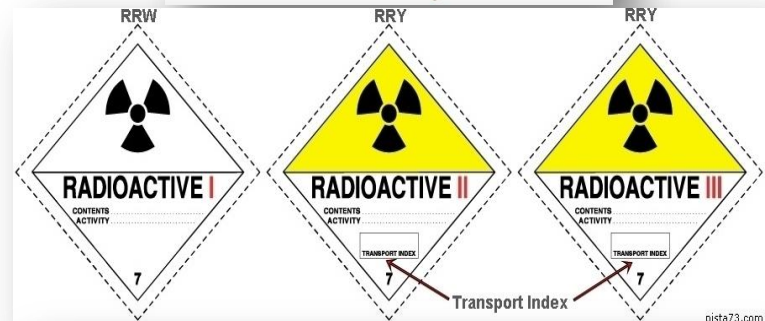
- 4-digit **UN Numbers**



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Declared Shipments package labels

- Labels on 2 opposite sides
 - 4 sides for freight containers and tanks
- Identify contents, total activity (TBq , MBq , or Bq)
- Transport Index: level of radiation emitted by package





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Declared Shipments Package Labels

- Other package markings
 - Proper shipping names, e.g.
 - Radioactive Material, Type A Package
 - Radioactive Material, Type B Package
 - UN numbers identify content:
e.g.
 - “UN2915”
 - “UN2916”

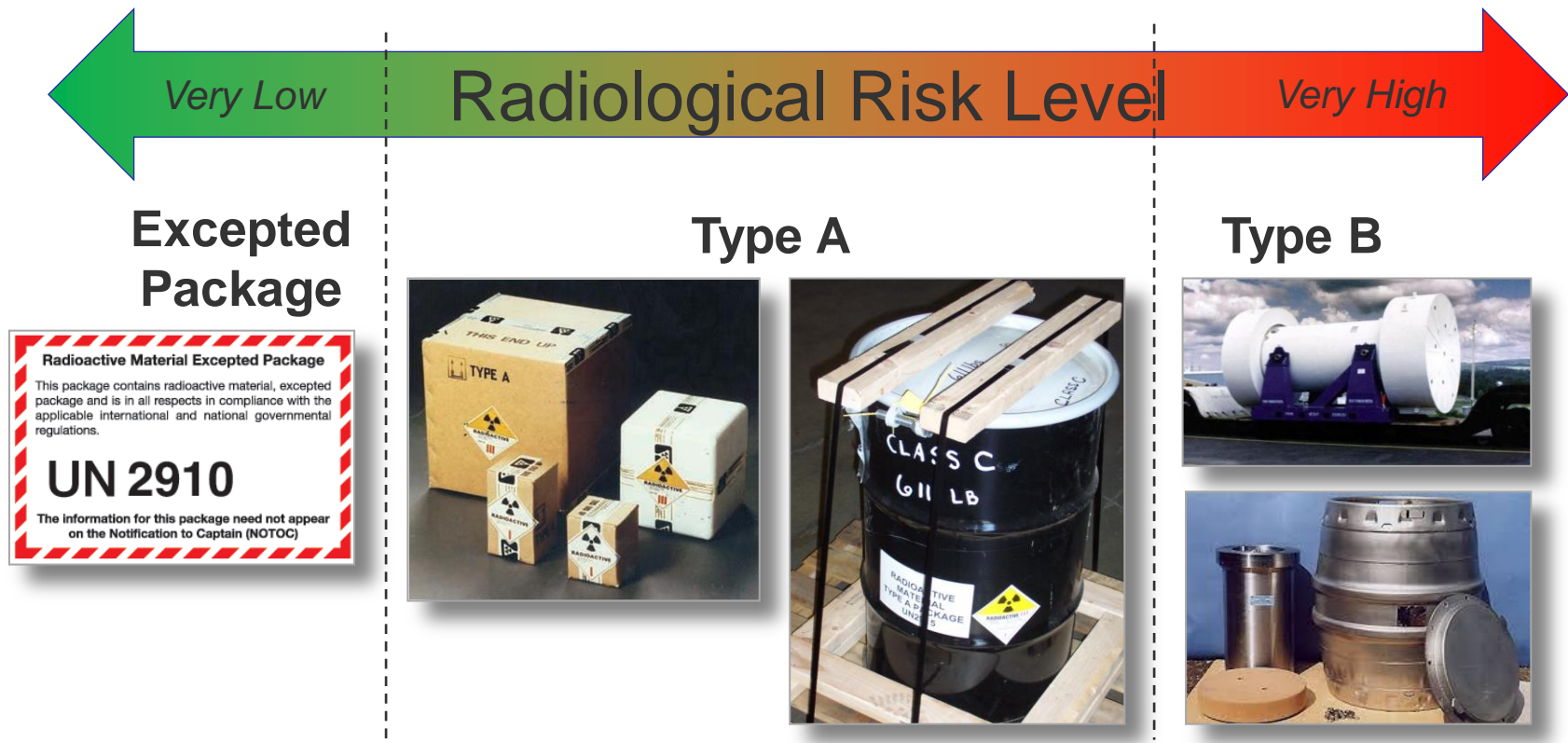




Declared Shipments: Packaging

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- Required packaging depends on radiological risk level of material





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Shipping Documents

Packing list, Dangerous Goods Shipping Document, Customs Declaration, licenses

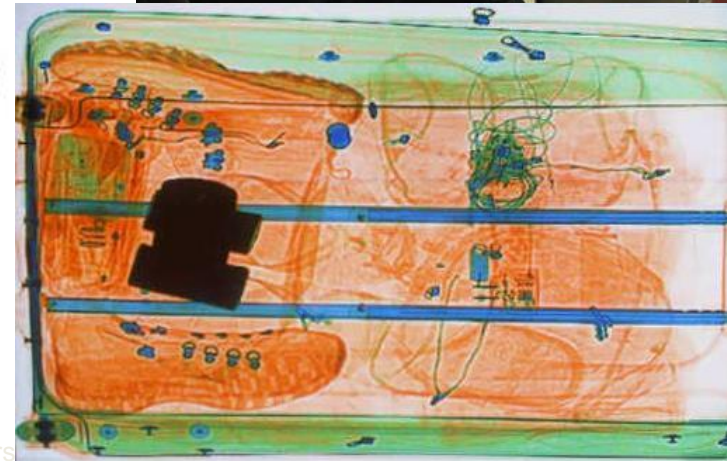
Ensure consistency!

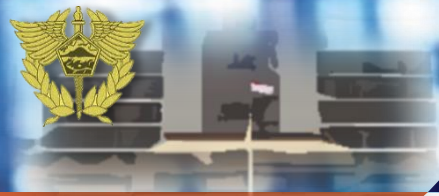
- Radionuclides in package
- Total activity of radioactive content
- Proper shipping name
- UN Number
- Category of the package



Smuggled Materials

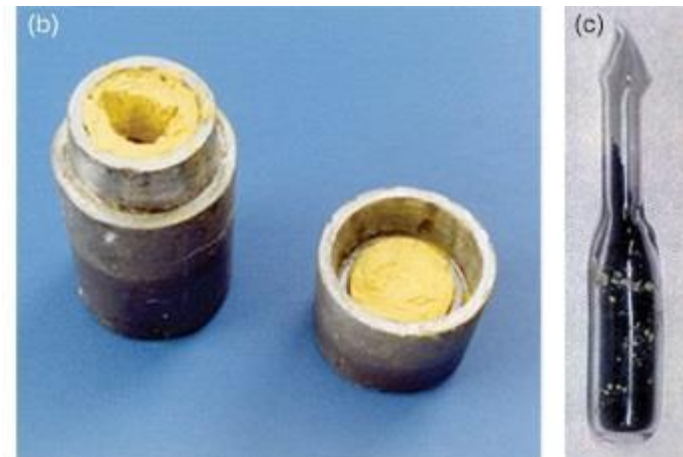
- Radioactive materials may be concealed by shielding or masking
 - Shields include dense materials (such as lead, tungsten, steel, iron, concrete) and materials that contain hydrogen (such as water, plastic, wax)
 - Masks include large amounts of NORM (such as ceramics, tile, fertilizer) or other radioactive materials





Smuggled Materials

- Of greatest significance:
Special nuclear materials
 - Can be used in nuclear weapons
 - Uranium 233 or 235
 - Plutonium
- Not intensely radioactive
 - Can be difficult to detect, especially when shielded
- Every gram of special nuclear material should be under strict control.





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Dual-Use Materials



What are Dual-Use Materials?

- Civilian purposes – BUT: WMD, conventional weapons, delivery systems
- Commonly traded, but licensable
- Metals, alloys,
or non-metals.

dual
use

Subject to controls if they meet technical specifications.



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Strategic Dual-Use Materials

Significant military advantage with:

- High strength and light weight
- Corrosion resistance
- Exotic properties

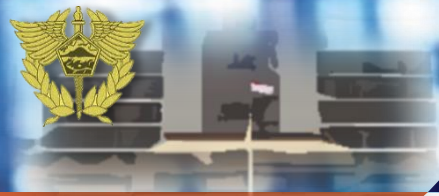




Examples of Dual Use Materials

- Aluminium alloys
- Aramid fiber
- Beryllium
- Bismuth
- Boron
- Boron carbide
- Calcium
- Carbon fiber
- Glass fiber
- Graphite
- Hafnium
- Magnesium
- Maraging steels
- Nickel alloys
- Nickel powder
- Niobium alloys
- Rhenium
- Titanium alloys
- Titanium-stabilized duplex stainless steel (Ti-DSS)
- Tungsten
- Tungsten carbide
- Zirconium

Many of these are profiled in the WCO STCE Guide.



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How to identify DU materials

1. Physical appearance
(not reliable)
2. Packaging and documentation
3. Technical analysis



Labels, markings, documents!



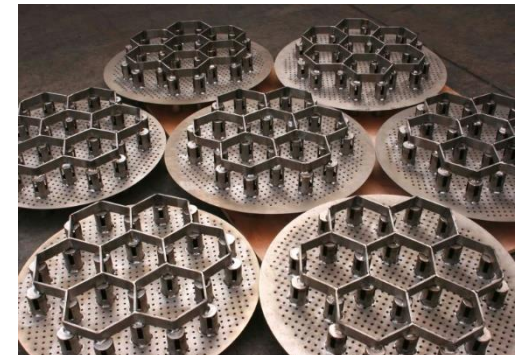
Forms of materials

Controlled:

- raw, unwrought, semi-fabricated
- manufactured articles



81.09		Zirconium and articles thereof, including waste and scrap.
	8109.20	- Unwrought zirconium; powders
	8109.30	- Waste and scrap
	8109.90	- Other



Metal powders: shipped like chemicals



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Shipments of Unwrought and Semi-Fabricated Forms

- For further processing
- Stamps: alloy information
- Certificates: composition
- Packaging: not very protective



CERTIFICATE OF ANALYSIS

13X 14933 (batch R)

Certified Reference Material Information

Type: MARAGING STEEL (CAST)
Form and Size: Disc 40mm Diameter x 15mm Thickness
Supplied by: MBH Analytical Limited
Produced by: Willan Metals Limited

Certified Analysis

Percentage element by weight

Element	C	Si	S	P	Mn	Ni
%	0.008	0.05	0.014	0.023	0.17	16.8

Element	Cr	Mo	Co	Al	Ti
%	0.022	3.83	11.4	<0.005	0.029



Indonesian Customs

Shipments of Articles

Manufactured forms,
shipped like industrial
equipment

- Cardboard boxes
- Pallets, crates
- Protection
- Labels + documents



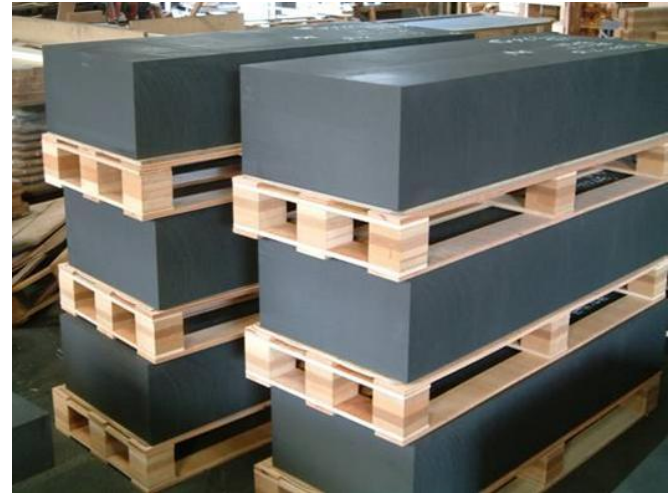
Protective packaging and labels

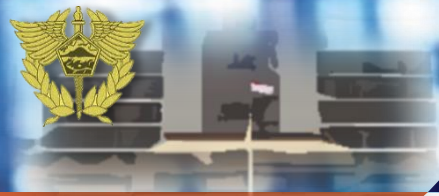


Indonesian Customs

Graphite

- HS 3801.10
- A form of carbon
- Aluminum and steel production (HS 8545)
- *Nuclear and missile uses*
- High density, high purity, fine grain size





Indonesian Customs

Aramid fiber

- ❖ HS 55.01/ 55.02
 - Not specific to aramids
- ❖ High strength and heat resistance
- ❖ Armor & ballistic protection, *advanced composites*
- ❖ Yellow



Kevlar, Nomex, Twaron



Indonesian Customs

Carbon fiber

- HS 68.15
- Black
- High strength, heat resistant, low weight
- Uses
 - automotive, sporting goods
 - *Uranium enrichment, missiles*



Most carbon fiber on the market is strategic



Indonesian Customs

Maraging Steels

- M300, M350, M400
- Trade names:
Vascomax®, NiMark®
- High strenght
- *Aerospace, nuclear,
military*



Most maraging steel is controlled.



Indonesian Customs

Nickel Powder

- HS 7504.00
- CAS 7440-02-0
- Purity and particle size
- *Strategic: uranium enrichment*





Indonesian Customs

Aluminum Alloys

- HS 7601.20, 7604.21, 7608.20
- Strength and form
- *Strategic: uranium enrichment*



Tubes > 75 mm in diameter.



Indonesian Customs

Tungsten

- HS 81.01
- CAS 1207-12-1
- Purity, form, particle size
- *Strategic: missile and nuclear weapon components.*

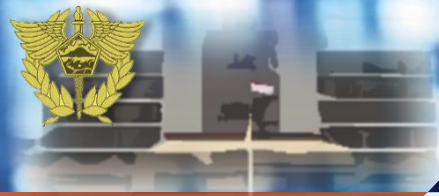


Extremely heavy



Indonesian Customs

Dual-Use Equipment



What is Dual-Use Equipment?

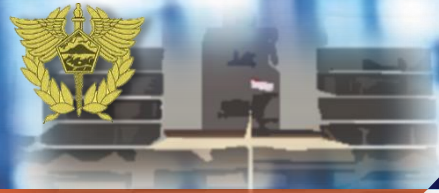
- Legit commercial uses, with WMD implications
- Commonly traded, but subject to licensing
- Includes
 - Industrial machinery and equipment (HS Chapter 84)
 - Electronics (HS Chapter 85)
 - Measuring and test equipment (HS Chapter 90)

Extremely wide array of strategic goods!



Characteristics

- Corrosion-resistant materials of construction, including linings
- Special markings
- Unusually high value
- Commodity-specific features



Indonesian Customs

Pumps for Liquids

- HS codes of greatest interest: 8413.50, 8413.60, 8413.70
- None are specific for strategic pumps
- Missile propulsion, nuclear reactors, chemical processing for CW



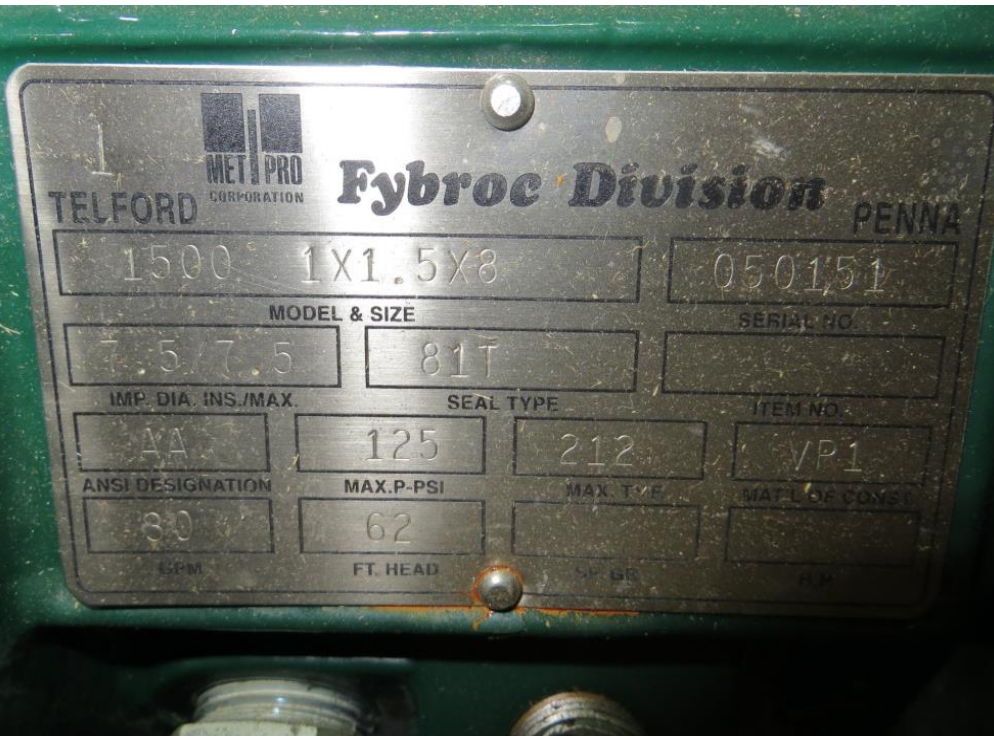
*Fluoropolymer-lined
seal-less pump*

Pumps are easy to identify, but technical reachback will be needed to determine if they are strategic



Indonesian Customs

Pumps for Liquids, *Continued*



Nameplate should provide useful data for technical reachback



Indonesian Customs

Chemical Reaction Vessels

- HS 8419.89
- Makes chemical compounds from precursors
- Cylindrical vessels with ports, flanges, agitator mount
- Strategic: volume + corrosion-resistant materials



Nameplates helpful for identifying vessels and their specifications



Valves

Indonesian Customs

- 84.81
- To control and regulate flow of fluids – ubiquitous
- Strategic: chemical, nuclear, missile concerns

Fluoropolymer-lined valve



Bellows-sealed valve



Servo valve

Stamps and markings for identification



Capacitors

Indonesian Customs

- HS 85.32
- To store and release electric charge.
- Majority of capacitors are not strategic.
- Strategic: special pulse discharge capacitors, high-energy storage capacitors.



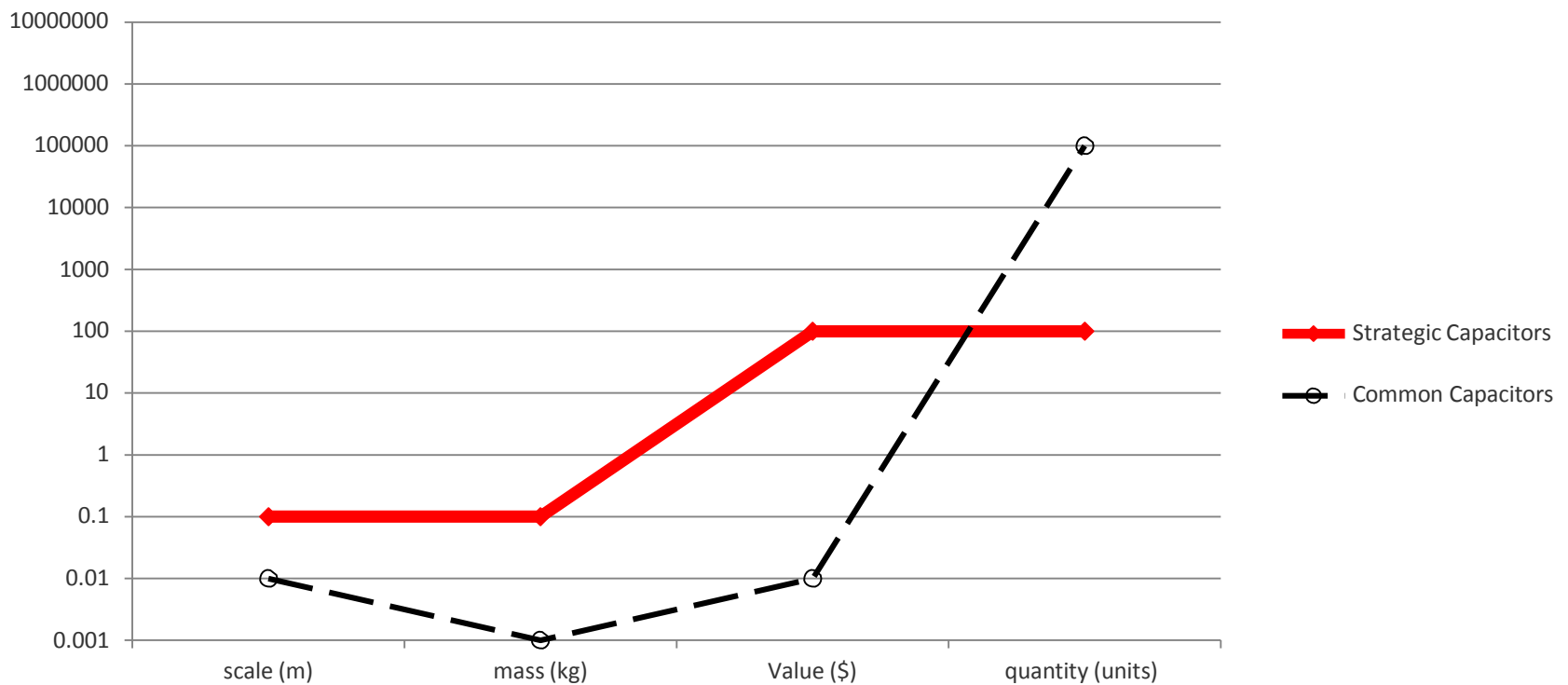
Voltage < 750 V: probably not strategic.



Indonesian Customs

Capacitors Fingerprint

Capacitor Fingerprint



Developing fingerprints requires understanding the strategic commodities.



Indonesian Customs

Weapons and Military Equipment



Strategic Military Weapons and Equipment

- Armoured vehicles such as tanks, armored fighting vehicles, armored personnel carriers, etc.
- Combat aircraft, helicopters, drones/UAVs, etc.
- Warships
- Large-caliber artillery systems
- Grenade launchers and other heavy weapons
- Ammunition/munitions for any of the above
- Communication systems, radars, missile guidance systems, etc.
- Equipment specially designed for military applications
- Parts specially designed for any of the above.

The Wassenaar Arrangement (www.wassenaar.org) provides extensive lists of munitions and related dual-use equipment.



UAVs/Drones

Indonesian Customs

- Unmanned Aerial Vehicles (UAV) are becoming increasingly common for both military and commercial uses
 - Both commercial and military systems can be strategic commodities!
 - They resemble manned aircraft but are generally smaller and without cockpits.
- UAVs with spraying and fogging systems could be used to disseminate chemical or biological weapons, but even these are commonly used for agricultural spraying.
- UAVs capable of carrying 500 kg payloads would also be extremely strategic.





Indonesian Customs

UAVs/Drones

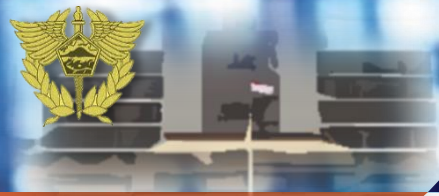


UAVs are often dismantled for shipment.



Strategies for Identifying Military Weapons and Equipment

- Many clues can indicate that equipment may be military in nature, including:
 - Color schemes
 - Ruggedized construction
 - Reference to Military Standards (MIL-STD/MIL-SPEC)
 - Military markings, stock numbers, and other designation systems



Color schemes

Indonesian Customs

- Military equipment often distinctive military color schemes
 - Drab tones of olive, green, grey, sand, or earth
 - Camouflage patterns





Indonesian Customs

Ruggedized construction

- Military equipment is often constructed to meet high specifications (MIL-SPEC) for resistance to shock, vibration, temperatures, etc.
- Visible indications include special connectors, rugged cases, covered ports, etc.





NATO Stock Numbers (NSN)

Indonesian Customs

- NSNs are very useful markings for identifying military equipment
 - 13-digit numerical code
 - NNNN-NN-NNN-NNNN
 - Digits 5 and 6 indicate a country of origin code
 - Identifies all the 'standardized material items of supply' as they have been recognized by all NATO countries





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Example – NATO Stock Number

TRUCK, UTILITY: 1/4 TON, 4x4, M151A2

NAT. STOCK NO. 2320-00-177-9258

MFD. BY _____

CONTRACT NO. _____

VEH IDENT NO. _____

MANUALS

LUBRICATION LO 9-2320-218-12

MAINTENANCE TM 9-2320-218-20

OPERATORS TM 9-2320-218-10

PARTS LIST TM 9-2320-218-20P

DATE OF DELIVERY _____ INSPECTION _____

U.S. PROPERTY

OPERATING INSTRUCTIONS

TRANSFER CASE	TRANSMISSION
IN ○	1 ○ 3 ○ R ○
FRONT DRIVE	○ N ○
OUT ○	2 ○ 4 ○

DISENGAGE FRONT AXLE DRIVE WHEN OPERATING ON HARD SURFACE.
SHALLOW FORDING DEPTH 21 INCHES



Indonesian Customs

Example – NATO Stock Number





**DIRECTORATE GENERAL OF
CUSTOMS AND EXCISE**

Thank You

