data of explosives, as required by the International Convention on the Transport of Dangerous Goods (C.I.M) articles 3 and 4 in Annex I RID, provided Governments are satisfied that such equipment will be used only by the railway authorities of current C.I.M. members, or by Government-accredited testing facilities in those countries, for the testing of explosives to transport safety standards, as follows:

a. Equipment for determining ignition and deflagration temperatures;
b. Equipment for steel-shell tests;
c. Drop hammers not exceeding 20 kg in mass for determining the sensitivity of explosives to shock;
d. Equipment for determining the friction sensitivity of explosives when exposed to charges not exceeding 36 kg in mass.

2020. Cryogenic and "superconductive" equipment, as follows, and specially designed components and accessories therefor:

2020. a. Equipment specially designed or configured to be installed in a vehicle for military ground, marine, airborne or space application and capable of operating while in motion and of producing or maintaining temperatures below 103 K (-170°C);

b. "Superconductive" electrical equipment (rotating machinery and transformers) specially designed or configured to be installed in a vehicle for military ground, marine, airborne or space applications and capable of operating while in motion, except direct-current hybrid homopolar generators that have single-pole normal metal armatures which rotate in a magnetic field produced by superconducting windings, provided those windings are the only superconducting component in the generator.

2022. Electrically triggered shutters of photochromic or electro-optical type having a shutter speed of less than 100 microseconds, except shutters which are an essential part of a high-speed camera.

2023. Directed energy weapons (DEW) systems and specially designed components, as follows:

2023. a. "Laser" systems specially designed for destruction or effecting mission-abort of a target;

b. Particle beam systems capable of destruction or effecting mission-abort of a target;

c. High power radio-frequency (RF) systems capable of destruction or effecting mission-abort of a target;

d. Specially designed components for systems embargoed by sub-items a., b. or c. above, including:

1. Prime power generation, energy storage, switching, power conditioning and fuel-handling equipment;
2. Target acquisition and tracking subsystems;
3. Subsystems capable of assessing target damage, destruction or mission-abort;
4. Beam-handling, propagation and pointing equipment;
5. Equipment with rapid beam slew capability for rapid multiple target operations;
6. Adaptive optics;
7. Current injectors for negative hydrogen ion beams which provide average injection currents over 50 mA with beam brightness (defined as current divided by the product of orthogonal transverse, normalised root mean square emittances) greater than 40 A/(cm2.mrad2) at kinetic energies of more than 20 keV; or
8. Specially designed components for the equipment embargoed by 1. to 7. above;

e. Equipment specially designed for the detection and identification of, and defence against, systems embargoed by sub-items a., b. or c. above, and specially designed components therefor;

f. Physical test models and related documentation for the systems, equipment and components described in sub-items a. to e. above.

(For the embargo parameters of "lasers" or associated "laser" components, see Category 1041.5.)

NOTE:

Directed energy weapons embargoed by this Item include systems whose capability is derived from the controlled application of:

a. "Lasers" of sufficient continuous wave or pulsed power to effect destruction similar to the manner of conventional ammunition;
b. Particle accelerators which project a charged or neutral particle beam with destructive power;
c. High pulsed power or high average power radio frequency beam transmitters which produce fields sufficiently intense to disable electronic circuitry at a distant target.

2024. "Software", as follows:

2024. a. "Software" specially designed or modified for the "development", "production" or "use" of equipment or materials embargoed by this List;

b. Specific "software", as follows:

1. "Software" specially designed for:
   a. Modelling, simulation or evaluation of military weapon systems;
   b. Development, monitoring, maintenance or up-dating of "software" embedded in military weapon systems;
   c. Modelling or simulating military operation scenarios, not embargoed by Item 2014;
   d. Command, Communications, Control and Intelligence (C^3I) applications;
2. "Software" for determining the effects of conventional, nuclear, chemical or biological warfare weapons.

2026. Kinetic energy weapon systems and associated equipment, as follows, and specially designed components therefor:

2026. a. Kinetic energy weapons systems specially designed for destruction or effecting mission-abort of a target;

b. Specially designed test and evaluation facilities and test models, including diagnostic instrumentation and targets, for dynamic testing of kinetic energy projectiles and systems;

c. Specially designed subsystems for systems embargoed by a. or b. above, including:

1. Launch-propulsion-subsystems capable of accelerating masses larger than 0.1 g to velocities in excess of 1.6 km/s, in single or rapid fire modes;
2. Prime power generation, energy storage, thermal management, conditioning, switching and fuel-handling equipment;
3. Target acquisition, tracking, fire control and damage assessment subsystems;
4. Homing seeker, guidance and divert propulsion (lateral acceleration) subsystems for projectiles.

Notes:

1. Weapon systems using sub-calibre ammunition and employing solely chemical propulsion are embargoed by Items 2001, 2002 or 2003 with respect to the ammunition.
2. c. 2. does not embargo technology for magnetic induction for continuous propulsion of civil transport devices.
3. This Item embargoes systems using any of the following methods of propulsion:
   a. Electromagnetic;
   b. Electrothermal;
   c. Plasma;
   d. Light gas; or
   e. Chemical (when used in combination with any of the above).