DUAL USE GOODS

What are dual use goods
How can you recognize them
What tools are available
Examples of not so easy to recognize dual use products
What can you do to help

TODAY'S PROGRAMME
The trade in dual-use items – goods, software and technology that can be used for both civilian and military applications and/or can contribute to the proliferation of Weapons of Mass Destruction (WMD) – is subject to controls to prevent the risks that these items may pose for international security. The controls derive from international obligations (in particular UN Security Council Resolution 1540, the Chemical Weapons Convention and the Biological Weapons Convention) and are in line with commitments agreed upon in multilateral export control regimes.

Sounds simple, right? Well I’m afraid it is not quite that simple, the level of knowledge required to identify all Dual Use goods is sometimes beyond to what can be expected from the bank checking your documentary payments which could lead to delays or even worse. But even as a corporate it is not always that clear."
The EU’s dual use export controls derives from the UN Security council Resolution 1540

the EU document describing the directive including examples is almost 300 pages long (!)

The examples range from high level, relative clear descriptions from “dual use items...which can be used for both civil and military purposes” to for instance 3-Hydroxy-1-Methylpiperidine which requires a quite high level of knowledge on the product side (we are talking scientific level)

So from the perhaps relative “simple” radarsystem which could be used for civilian as well as military purposes (or offensive to defense) to a chemical compound which is perhaps only 1 molecule away from being civilian yet is actually more military by nature
 PRODUCTS LISTED (NOT COMPREHENSIVE)

- Arms – arms related equipment/parts
- Software
- technology
- Chemicals
- Viruses
- Bacteria
- Toxins
SOME EXAMPLE PRODUCTS WHICH ARE ON THE LIST

10. 3-Hydroxy-1-methylpiperidine (3554-74-3);
11. N,N-Diisopropyl-(beta)-aminoethyl chloride (96-79-7);
12. N,N-Diisopropyl-(beta)-aminoothane thiol (5842-07-9);
13. 3-Quinuclidinol (1619-34-7);
14. Potassium fluoride (7789-23-3);
15. 2-Chloroethanol (107-07-3);
16. Dimethylamine (124-40-3);
17. Diethyl ethylphosphonate (78-38-6);
18. Diethyl-N,N-dimethylphosphoramide (2404-03-7);
19. Diethyl phosphate (762-04-9);
20. Dimethylamine hydrochloride (506-59-2);
21. Ethyl phosphinyl dichloride (1498-40-4);
22. Ethyl phosphonyl dichloride (1366-59-8);
And to make it even more complicated

62. Sodium hexafluorosilicate (16893-85-9);

63. Methylphosphonothioic dichloride (676-98-2).

Note 1: For exports to "States not Party to the Chemical Weapons Convention", 1C350 does not control "chemical mixtures" containing one or more of the chemicals specified in entries 1C350.1, .3, .5, .11, .12, .13, .17, .18, .21, .22, .26, .27, .28, .31, .32, .33, .34, .35, .36, .54, .55, .56, .57 and .63 in which no individually specified chemical constitutes more than 10% by the weight of the mixture.

Note 2: For exports to "States Party to the Chemical Weapons Convention", 1C350 does not control "chemical mixtures" containing one or more of the chemicals specified in entries 1C350.1, .3, .5, .11, .12, .13, .17, .18, .21, .22, .26, .27, .28, .31, .32, .33, .34, .35, .36, .54, .55, .56, .57 and .63 in which no individually specified chemical constitutes more than 30% by the weight of the mixture.

Note 3: 1C350 does not control "chemical mixtures" containing one or more of the chemicals specified in entries 1C350.2, .6, .7, .8, .9, .10, .14, .15, .16, .19, .20, .24, .25, .30, .37, .38, .39, .40, .41, .42, .43, .44, .45, .46, .47, .48, .49, .50, .51, .52, .53, .58, .59, .60, .61 and .62 in which no individually specified chemical constitutes more than 30% by the weight of the mixture.

Note 4: 1C350 does not control products identified as consumer goods packaged for retail sale for personal use or packaged for individual use.

1C351 Human pathogens, zoonoses and "toxins", as follows:

a. Viruses, whether natural, enhanced or modified, either in the form of "isolated live cultures" or as material including living material which has been deliberately inoculated or contaminated with such cultures, as follows:
2A

Systems, Equipment and Components

N.B.: For quiet naming bearings, see the Military Goods Controls.

2A001 Anti-friction bearings and bearing systems, as follows, and components therefor:

Note: 2A001 does not control balls with tolerances specified by the manufacturer in accordance with ISO 3290 as grade 5 or worse.

a. Ball bearings and solid roller bearings, having all tolerances specified by the manufacturer in accordance with ISO 492 Tolerance Class 4 (or ANSI/ABMA Std 20 Tolerance Class ABEC-7 or RBEC-7, or other national equivalents), or better, and having both rings and rolling elements (ISO 5593), made from monel or beryllium;

Note: 2A001.a. does not control tapered roller bearings.

b. Other ball bearings and solid roller bearings, having all tolerances specified by the manufacturer in accordance with ISO 492 Tolerance Class 2 (or ANSI/ABMA Std 20 Tolerance Class ABEC-9 or RBEC-9, or other national equivalents), or better;

Note: 2A001.b. does not control tapered roller bearings.

c. Active magnetic bearing systems using any of the following:

1. Materials with flux densities of 2.0 T or greater and yield strengths greater than 414 MPa;
2. All-electromagnetic 3D homopolar bias designs for actuators; or
If you take a look at for instance the manufacturing equipment mentioned in the list, you will notice that the more precise a certain machine can produce the more likely it is such a machine would end up on the restricted list, as it for instance could be used in the production of weapons or the like.

For other products it might be more difficult to make that distinction.

As you can imagine, the fact that something “might” be “Dual use” opens the door for a whole range of discussions and especially in case of a documentary payment it can lead to delays in payment when doubt has arisen.

“IDENTIFIERS” OF DUAL USE
Once it is clear that a party wants to export a good which is branded “dual use” (which should be the case for most products a corporate wants to export, the exporter can apply for a export license (usually with the customs agency in the country of the exporter)

In case of doubt such license can be refused

When exporting to more sensitive countries requests are escalated to the ministry of foreign affairs in a particular country

PLEASE NOTE Your bank might decide on its own not to process if they are not comfortable that the exporter has fully complied with applicable law or whether the products is dual use or not

DUAL GOODS, WHEN IT IS CLEAR (FOR CORPORATES)
As a summary, for some of the goods it is clear from the outset that they can be used for both civilian as well as military purposes and (sometimes depending on the end-user) such a product can be prohibited from being exported without a proper license.

For other products it might be less clear cut and again the country of export can have an influence on whether you are allowed to export and whether a license will need to be issued.

Not all countries globally have implemented the dual use goods list however the EU and most other Western countries have which could complicate matters when dealing with international operating clients, please note that for DB Amsterdam, EU law applies (Bafin and local regulator where applicable).
EXAMPLE OF A PRODUCT WHICH IS FAIRLY REGULAR NEVERTHELESS IS ALSO DUAL USE

4. **Aluminium alloys** having any of the following:

   - a. A tensile strength of 240 MPa or more at 473 K (200°C); or
   - b. A tensile strength of 415 MPa or more at 298 K (25°C);

**Reasons For Control**

These metal alloys are used in the manufacture of centrifuge components such as tubes and rotors. Such centrifuges are employed in the process of enriching uranium. The resulting enriched uranium has military application in nuclear fission weapons. Civil uses of enriched uranium include its application as fuel in nuclear power reactors.
<table>
<thead>
<tr>
<th>ALLOY GROUP</th>
<th>PRINCIPAL ALLOYING ELEMENT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1xxx</td>
<td>Unalloyed Aluminum</td>
<td>Purity of 99.0% or Greater</td>
</tr>
<tr>
<td>2xxx</td>
<td>Copper</td>
<td>Heat Treatable Alloys</td>
</tr>
<tr>
<td>3xxx</td>
<td>Manganese</td>
<td></td>
</tr>
<tr>
<td>4xxx</td>
<td>Silicon</td>
<td>Low Melting Point Alloys</td>
</tr>
<tr>
<td>5xxx</td>
<td>Magnesium</td>
<td></td>
</tr>
<tr>
<td>6xxx</td>
<td>Magnesium and Silicon</td>
<td>Heat Treatable Alloys</td>
</tr>
<tr>
<td>7xxx</td>
<td>Zinc</td>
<td>Heat Treatable Alloys</td>
</tr>
<tr>
<td>8xxx</td>
<td>Other Elements</td>
<td></td>
</tr>
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</table>
### 7000 series

#### 7000 series aluminium alloy nominal composition (% weight) and applications

<table>
<thead>
<tr>
<th>Alloy</th>
<th>Al contents</th>
<th>Alloying elements</th>
<th>Uses and refs</th>
</tr>
</thead>
<tbody>
<tr>
<td>7005</td>
<td>93.3</td>
<td>Zn 4.5, Mg 1.4, Mn 0.45, Cr 0.13, Zr 0.14, Ti 0.04</td>
<td>Extrusions</td>
</tr>
<tr>
<td>7039</td>
<td>92.3</td>
<td>Zn 4.0, Mg 3.3, Mn 0.2, Cr 0.2</td>
<td></td>
</tr>
<tr>
<td>7049</td>
<td>88.2</td>
<td>Zn 7.8, Mg 2.8, Cu 1.6, Cr 0.15</td>
<td>Universal</td>
</tr>
<tr>
<td>7050</td>
<td>89.0</td>
<td>Zn 6.2, Mg 2.3, Cu 2.3, Zr 0.12</td>
<td>Universal, aerospace</td>
</tr>
<tr>
<td>7086</td>
<td>87.6</td>
<td>Zn 7.8, Mg 2.5, Cu 2.0, Zr 0.12</td>
<td>Aerospace, strongest Al alloy</td>
</tr>
<tr>
<td>7072</td>
<td>99.0</td>
<td>Zn 1.0</td>
<td>Sheet, foil</td>
</tr>
<tr>
<td>7075 &amp; 7175</td>
<td>90.0</td>
<td>Zn 5.6, Mg 2.5, Cu 1.6, Cr 0.23</td>
<td>Universal, aerospace (cubesats)</td>
</tr>
<tr>
<td>7079</td>
<td>91.4</td>
<td>Zn 4.3, Mg 3.3, Cu 0.6, Mn 0.2, Cr 0.15</td>
<td>-</td>
</tr>
<tr>
<td>7116</td>
<td>93.7</td>
<td>Zn 4.5, Mg 1, Cu 0.8</td>
<td>Heat-treatable</td>
</tr>
<tr>
<td>7129</td>
<td>93.2</td>
<td>Zn 4.5, Mg 1.6, Cu 0.7</td>
<td>-</td>
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<tr>
<td>7178</td>
<td>88.1</td>
<td>Zn 5.6, Mg 2.7, Cu 2.0, Cr 0.26</td>
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<tr>
<td>7475</td>
<td>90.3</td>
<td>Zn 5.7, Mg 2.3, Si 1.5, Cr 0.22</td>
<td>Universal</td>
</tr>
</tbody>
</table>

### 8000 series

#### 8000 series aluminium alloy nominal composition (% weight) and applications

<table>
<thead>
<tr>
<th>Alloy</th>
<th>Al contents</th>
<th>Alloying elements</th>
<th>Uses and refs</th>
</tr>
</thead>
<tbody>
<tr>
<td>8011</td>
<td>98.7</td>
<td>Si 0.6, Fe 0.7</td>
<td>Work-hardened</td>
</tr>
<tr>
<td>8090</td>
<td>94.8</td>
<td>Li 2.45, Cu 1.3, Mg 0.95, Zr 0.12</td>
<td>aerospace, cryogenics</td>
</tr>
</tbody>
</table>
4. Aluminium alloys having any of the following:
   a. A tensile strength of 240 MPa or more at 473 K (200°C); or
   b. A tensile strength of 415 MPa or more at 298 K (25°C);

7068 aluminium alloy

From Wikipedia, the free encyclopedia

7068 aluminium alloy is one of the strongest commercially available aluminium alloys, and with a tensile strength comparable to that of some steels. 7068-T6511 has typical ultimate tensile strength of 710 MPa (103 ksi) versus a similar product produced from 7075-T6511 that would have a typical ultimate tensile strength of 640 MPa (93 ksi). Typical yield strength for alloy 7068-T6511 is 633 MPa (92.1 ksi) versus 590 MPa (86 ksi) for a similar product produced from 7075-T6511. Strength allowables for this alloy are provided in Metallic Materials Properties Development and Standardization (MMPDS) for design.

The main alloying elements are zinc (7.3-8.3%), magnesium (2.2-3.0%), copper (1.6-2.4%) and zirconium (0.05-0.15%), with traces of silicon, iron, manganese, chromium, titanium.

Uses [edit]

Primarily developed for ordnance applications, alloy 7068 is now being used or considered for markets like the aerospace and automotive industries (valve body and connecting rod applications), medical devices, such as prosthetic limbs, as well as recreational products like bicycles and mountain climbing equipment. Most recently, it was discovered that 7068 is used to make the outer encasing of the iPhone 6s and iPhone 6s Plus.

Manufactured by Kaiser USA. Supplied throughout Europe by Smiths Advanced Metals.
A bicycle can be made from an aluminium alloy in the 7000 series but the same holds true for the production of M16 rifles (7015), but this alloy is also used for inline skates and mascara roles.
Ammonium nitrate is a chemical compound, the nitrate salt of the ammonium cation. It has the chemical formula \( \text{NH}_4\text{NO}_3 \), simplified to \( \text{N}_2\text{H}_4\text{O}_3 \). It is a white crystal solid and is highly soluble in water. It is predominantly used in agriculture as a high-nitrogen fertilizer.\(^4\) Its other major use is as a component of explosive mixtures used in mining, quarrying, and civil construction. It is the major constituent of ANFO, a popular industrial explosive which accounts for 80% of explosives used in North America; similar formulations have been used in improvised explosive devices. Many countries are phasing out its use in consumer applications due to concerns over its potential for misuse.
5. Penalties

Penalties for violating U.S. export controls can be significant, including fines of up to $250,000 per violation, forfeited export privileges, and jail time for willful offenders. Representative enforcement cases include the following:

- **Titanium Rods Without Licenses** – Service Steel Aerospace Corp. of Tacoma, Washington (SSA) agreed to pay a civil penalty of $12,000 to settle charges that it committed three violations of the EAR on or between January 7, 2005, and December 29, 2005, by exporting titanium rods – items subject to the EAR and controlled for nuclear nonproliferation reasons – from the United States to Israel and Mexico without the necessary Department of Commerce licenses.

- **Nickel Alloy Pipe to Iran** – On December 16, 2005, PA Inc. of Houston, Texas, was sentenced to three years of probation and a $50,000 criminal fine following a guilty plea to a charge of attempting to export specialty nickel alloyed piping to Iran. On August 19, 2005, BIS assessed a $50,000 administrative penalty and a five year suspended denial of export privileges as part of an agreement with PA Inc. to settle administrative charges related to these transactions.

- **Nickel Powder to Taiwan** – On June 21, 2007, Theresa Chang pled guilty to one count of making false statements related to the export of nickel powder controlled for nuclear proliferation reasons to Taiwan without an export license. She was sentenced to three years of probation and to pay a $5,000 criminal fine.

- **Nickel Alloyed Pipes to Iran** – On November 30, 2007, Proclad International Pipelines, Ltd., a British corporation, pled guilty in United States District Court to one count of violating the International Emergency Economic Powers Act for conspiring to export nickel alloyed pipes to Iran. As part of a global settlement, Proclad agreed to pay $100,000 in civil penalties and to be subject to a suspended order denying its export privileges for a period of seven years.

- **Nickel Powder Without Licenses** – On October 1, 2009, Novomet Specialty Products Corporation agreed to pay $700,000 to BIS for 15 unlicensed shipments of controlled nickel powder worth about $80,000.

- **Titanium Alloy Billets to China** – Firth Rixson Monroe, a specialty metals forger, agreed to pay $85,000 to BIS to settle charges that the company exported 1,055 pounds of 6-2-4-2 titanium alloy billets worth about $35,000 to China. The company voluntarily disclosed the exports to BIS.

- **Minxia Non-Ferrous Metals, Inc.** – paid $1,298,000.00 to settle allegations of dealing in Cuban metals between 2003 and 2006.

With these in mind, it is imperative that companies take their export compliance responsibilities seriously. Doing so is not only critical for the companies themselves, but for the safety and security of the U.S. and its allies.
What can you as a corporate do to avoid delays in payment (or even, worst case scenario prosecution) when dealing with products which are Dual Use

- when in doubt, check the product at for instance the UK Goods Checker website

https://www.ecochecker.trade.gov.uk/spirefox5live/fox/spire/

Contact Customs to check whether you would need to apply for a license

Finally contact your bank in case you will be importing or exporting by means of a documentary payment so that you can get their opinion whether something might cause issues or not

WHAT CAN YOU DO ?