

# **LEGAL ASPECTS** of Capacitors Supplies – Part 1





## **ZEZ SILKO manufactures and supplies a** wide range of PP film capacitors

#### LV PFC capacitors



MV capacitors



## Induction heating caps

Energy storage caps









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**PRODUCT RANGE** 

### **Power Electronics Capacitors**





Reactors



### Capacitor banks





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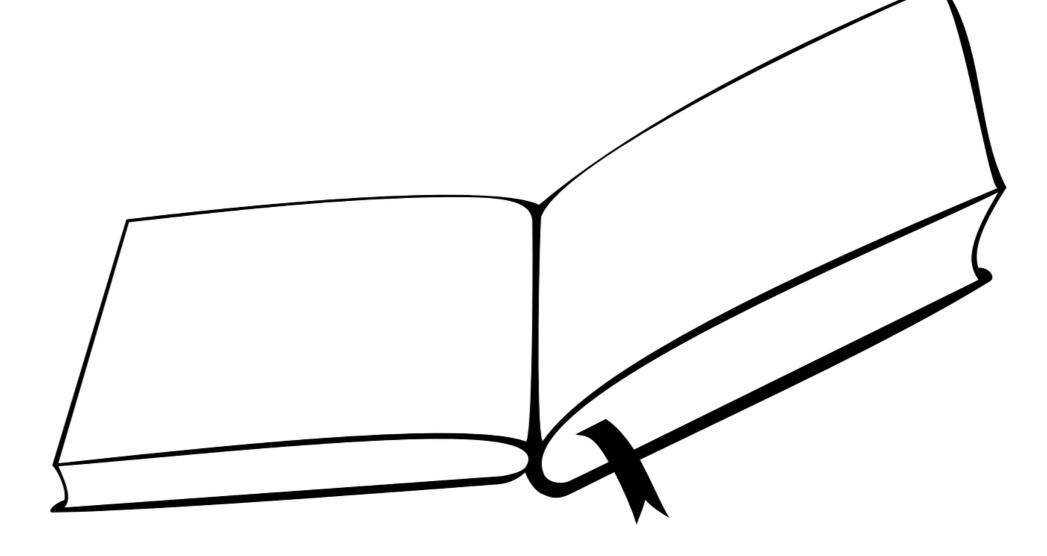
## ✓ Dual-use goods – Part 1

## ✓ Dangerous goods (ADR) – Part 2

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## **Dual-use goods definition:**

Dual-use goods are goods that can be used for both the civilian and the military purposes.

Usually dual-use goods are explained as the good that can have more than one purpose at the same time, e.g. Global Positioning System (GPS).

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## **Dual-use goods examples:**

✓ Chemicals Machinery ✓ Carbon fiber ✓ Aluminum alloy ✓UAV (drones) Capacitors



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#### EXAMPLES













## **Dual-use goods evaluation:**

 Country of destination (EU or non EU) ✓ HS code ✓ Description ✓Consignee ✓Origin

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#### **EVALUATION**







## **Dual-use goods specification:**

## 1) **3A001e High energy storage capacitors** A) Capacitors with a repetition rate of less than 10 Hz (single shot capacitors)

 $\checkmark$  voltage rating equal to or more than 5 kV energy density equal to or more than 250 J/kg ✓ total energy equal to or more than 25 kJ

#### B) Capacitors with a repetition rate of 10 Hz or more (repetition rated capacitors)

✓ voltage rating equal to or more than 5 kV energy density equal to or more than 50 J/kg total energy equal to or more than 100 J charge/discharge cycle life equal to or more than 10 000













## **Dual-use goods specification:**

## 2) 3A201 Electronic parts and components other than **3A001**

#### Capacitors having either of the following sets of characteristics A)

✓ voltage rating greater than 1.4 kV

- energy storage greater than 10 J
- $\checkmark$  capacitance greater than 0,5  $\mu$ F
- ✓ series inductance less than 50 nH

## B)

- ✓ voltage rating greater than 750 V
- $\checkmark$  capacitance greater than 0,25  $\mu$ F
- ✓ series inductance less than 10 nH













# ZEZ SILKO advantages

 $\checkmark$ 

90 years of capacitor production Experienced technical support Tailor made solution Flexibility High quality Full range of products Short delivery time

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**TESTING of CAPACITORS** 

Advantages







## Thank you very much for your attention!



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