(Cyber)security
Cybersecurity

• What is cybersecurity?

• Is there a general definition?

• Cybersecurity is the practice of protecting systems, networks, and programs from digital attacks.
Cyberattacks

• A cyberattack is a malicious and deliberate attempt by an individual or organization to breach the information system of another individual or organization.

• Cyberattacks are usually aimed at:
  o accessing, changing, or destroying sensitive information;
  o extorting money from companies/users;
  o or interrupting normal business processes.

• Cyber attacks hit companies every day
Cyberattacks

• Common types of Cyber attacks
  – Malware
  – Phishing
  – Man-in-the-middle attack
  – Denial-of-service attack
  – Structured Query Language (SQL) injection
  – Zero-day exploit
  – ........
European legislation and agencies

- Cybersecurity Act (Regulation 2019/881)
- eEIDAS (Electronic IDentification Authentication and trust Services – Regulation 910/2014)
- GDPR (General Data Protection Regulation - Regulation 2016/679)
- NIS (Directive on Security of Network and Information Systems - 2016/1148)
- The European Union Agency for Cybersecurity (ENISA)
Cybersecurity and critical Infrastructure

- Deliberate disruptions of critical automation systems prove that cyberattacks have a significant impact on critical infrastructures and services.
- Critical infrastructures are for instance:
  - electricity generation plants,
  - transportation systems
  - manufacturing facilities
- Industrial Control Systems (ICS)
  - SCADA system (Supervisory Control and Data Acquisition)
  - Distributed Control Systems (DCS)
  - Programmable Logic Controllers (PLC’s)
Security

• What is security?

• Security is the protection of a person, building, organization, or country against threats.

• What means security for a Seveso-company?

• Prevent that unwanted persons or organizations become a threat for instance by ensuring that unwanted persons or companies can’t enter the site/company/systems.
Cybersecurity & Seveso III directive

- Is cybersecurity an issue for Seveso-companies?

- Can a major accident occur due to cybersecurity?

- Is cybersecurity a Seveso issue?