



***Lecture 2: Security Management,
Human Factors & Physical Security***

The standards ISO/IEC 27001 and ISO/IEC 27002 are available to UiO students online via the INF3510 wiki pages <https://wiki.uio.no/mn/ifi/INF3510-2012/>. You need to use your UiO logon to access the wiki pages.

QUESTION 1

Check out the status of the ISO27000 standards series, e.g. on Wikipedia.

- Which standards have been published?
- Which standards are planned?
- Suggest possible drivers for developing new IT security standards.

QUESTION 2

- How are the standards ISO/IEC 27001 and ISO/IEC 27002 related?
- Which one of the standards can be used for certification, and why?
- How should an organisation determine which security controls to implement?

QUESTION 3

Briefly and clearly explain the PDCA model applied to ISMS processes. Plan - Do - Check - Act model outlined on page v of ISO/IEC 27001.

QUESTION 4

- What is a social engineering attack? See e.g. Harris p.967, SANS InfoSec Reading Room on Social Engineering (<http://www.sans.org/rr/whitepapers/engineering/>), or any other relevant source.
- Describe three typical social engineering attack strategies.
- Assume that people are the access control function against social engineering attacks. What would be a false positive and a false negative in this scenario?
- When using a firewall as an analogy for human defense against social engineering attacks, what would then be the analogy of the firewall configuration?

QUESTION 5

Access control mechanisms fall into one of two categories: physical or logical.

- When is physical access control not enough or not possible?
- Give three examples of physical access control mechanisms.
- What is meant by a multilayered approach to physical access control?

QUESTION 6

- a. What does the abbreviation CPTED stand for?
- b. How does CPTED work?
- c. Which are the main principles used in CPTED

QUESTION 7

- a. Create a mapping of the correspondence between the 11 security domains of ISO27002 and the 10 security domains of CISSP.
- b. Make a judgment about how well aligned they are.
- c. Mention security topics that you think are missing in one or the other.