

OT-SECURITY: CYBERSECURITY FÜR KRITISCHE PRODUKTIONSANLAGEN

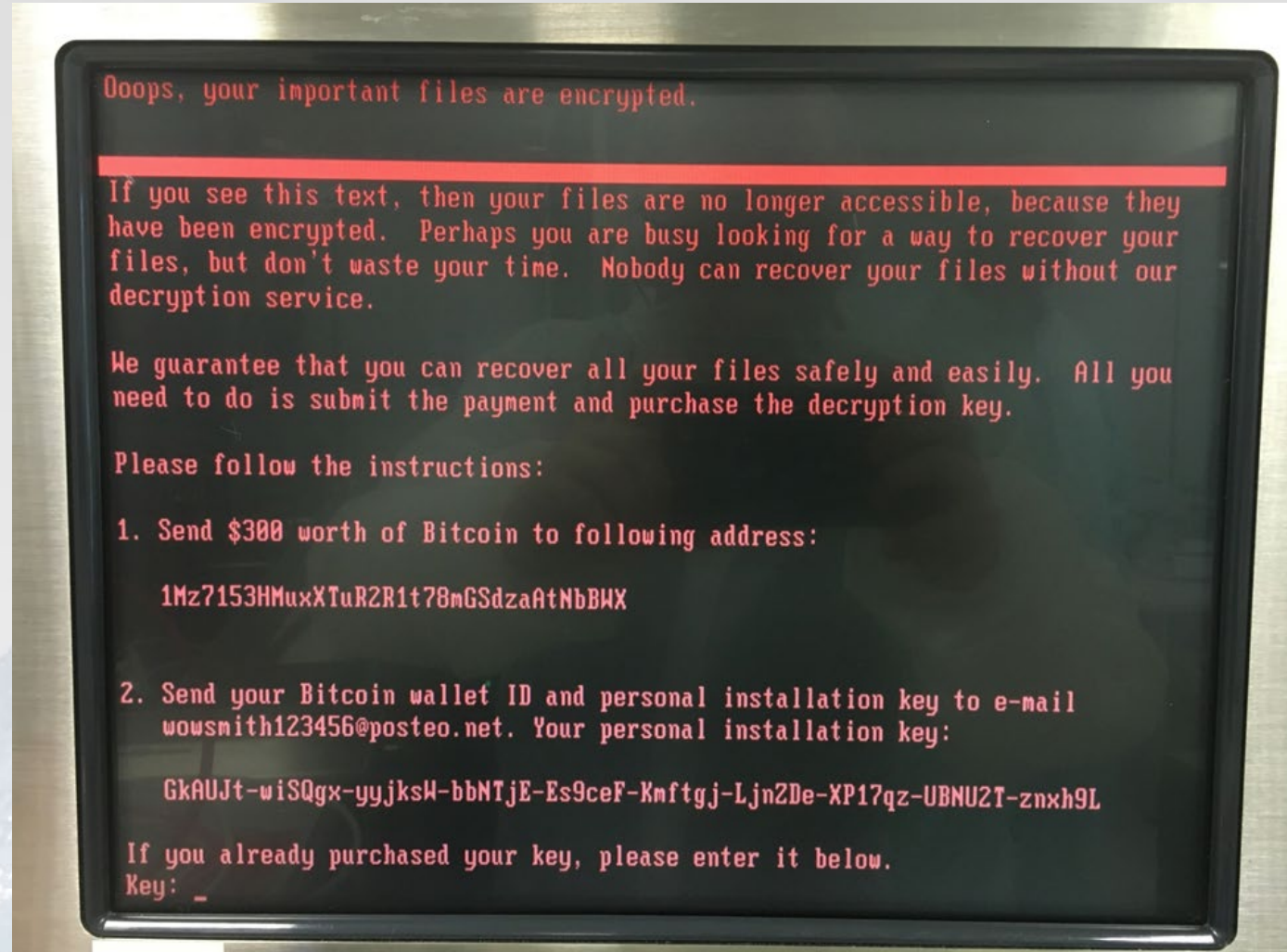
Harald Gattermeyer



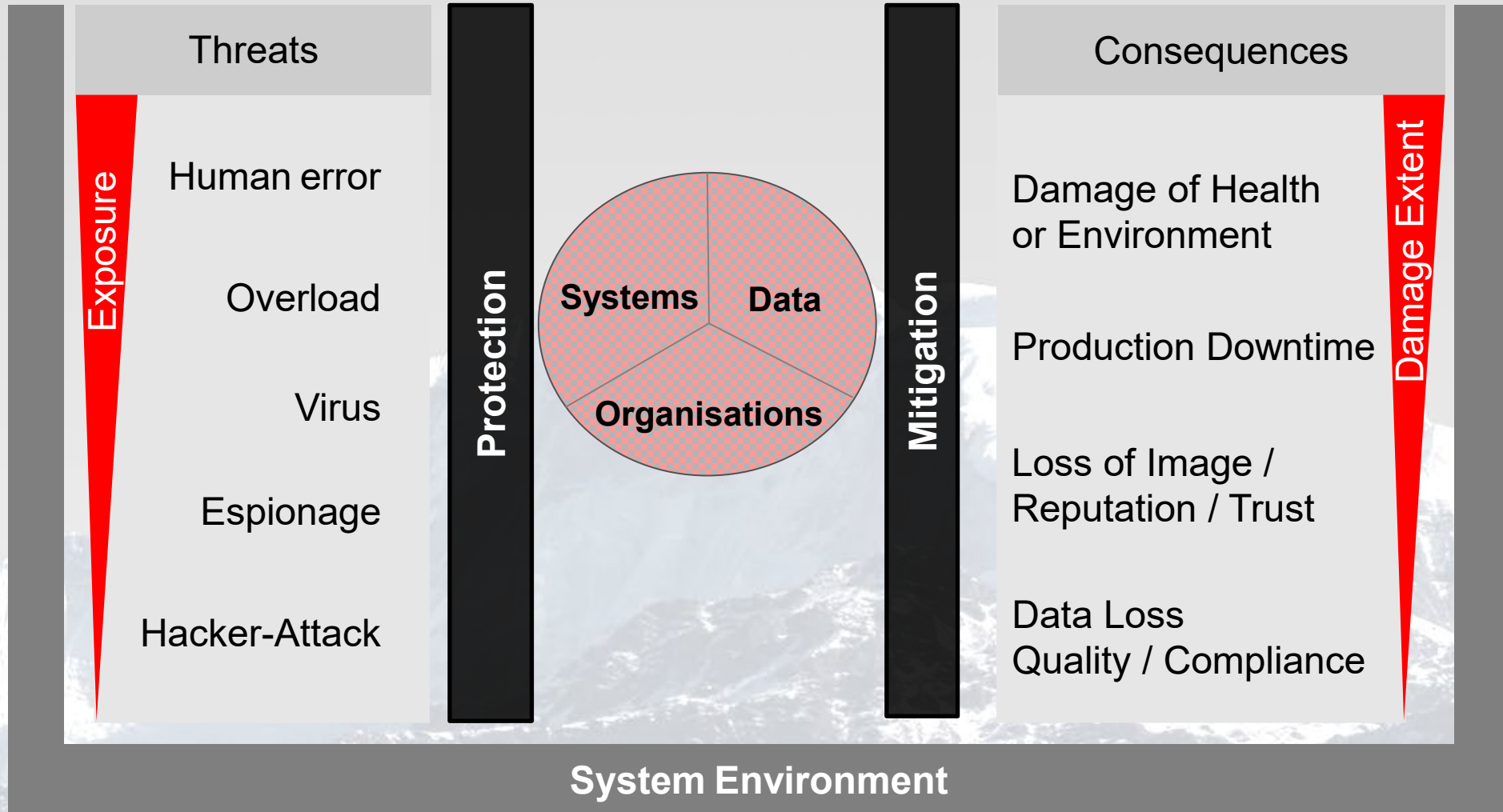
ANAPUR AG

- Founded 2001
- Offices in Mannheim and Vienna
- OT-Security & GxP - Services & Consulting
- Assessments, Projects, Operation Support, Trainings
- Chemical, Pharma, Food, Energy, Train, Healthcare



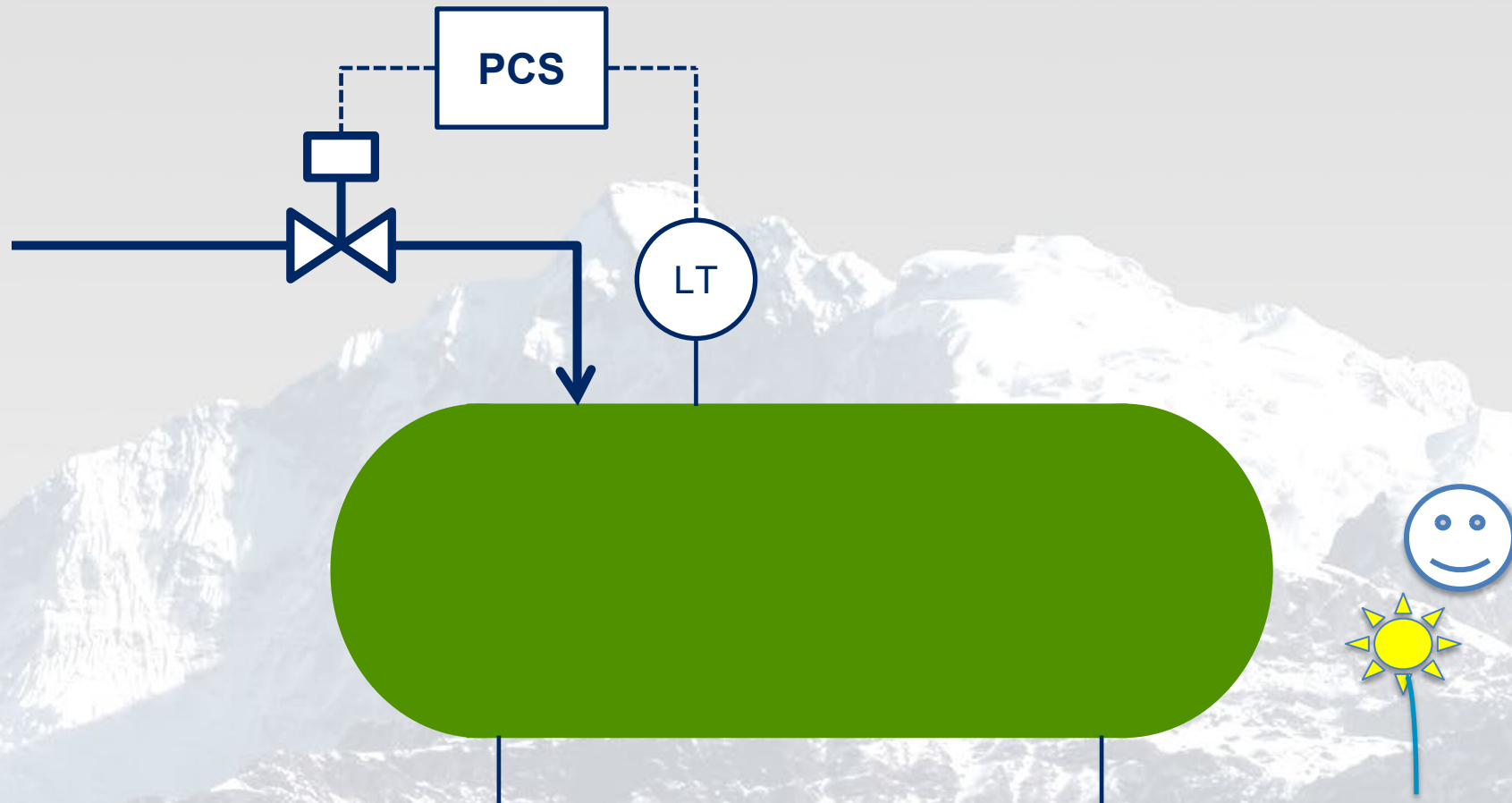


OT & RISK

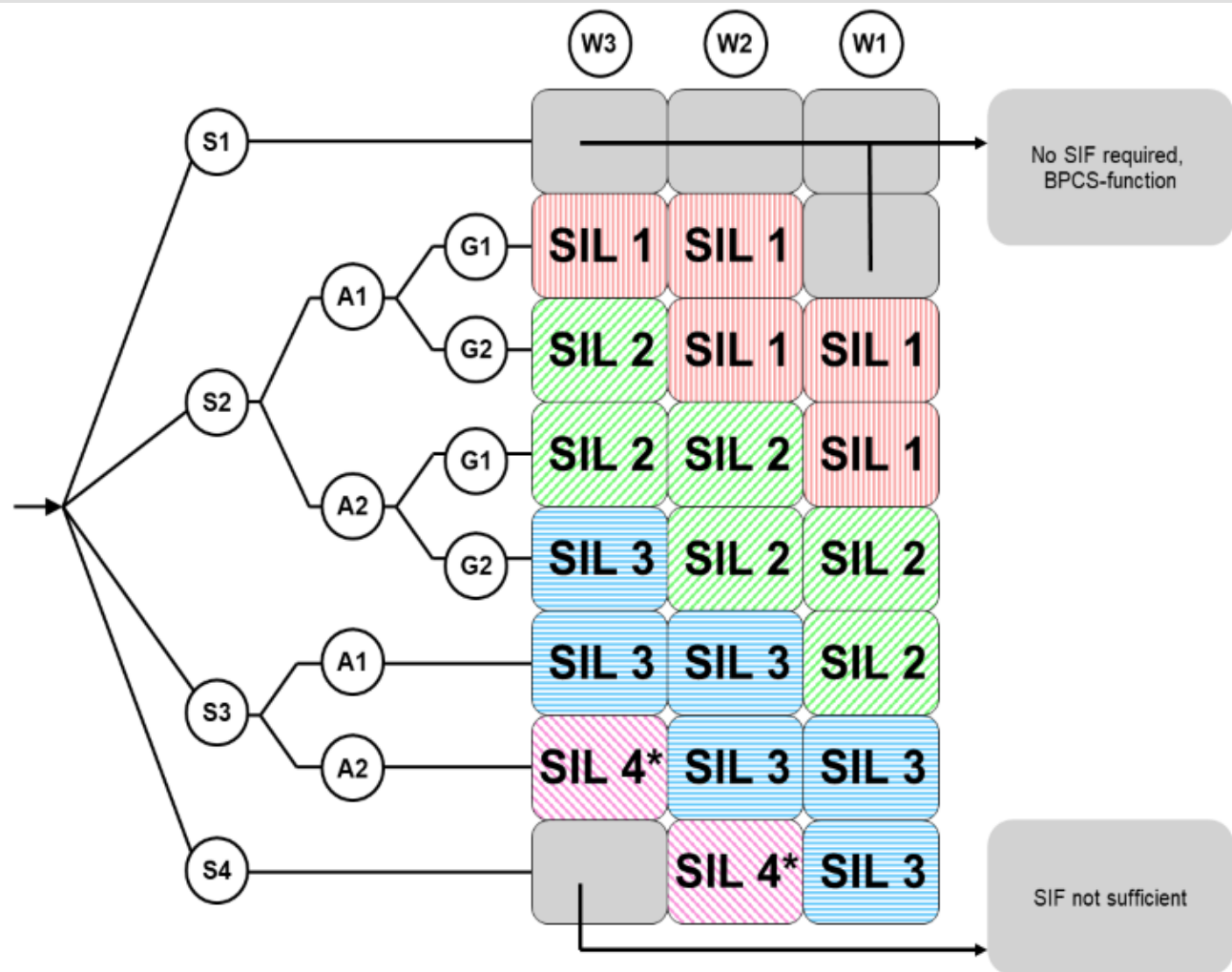




BASIC PROCESS CONTROL SYSTEM



DETERMINING RISK (RISK GRAPH VDI 2180)



Legend:

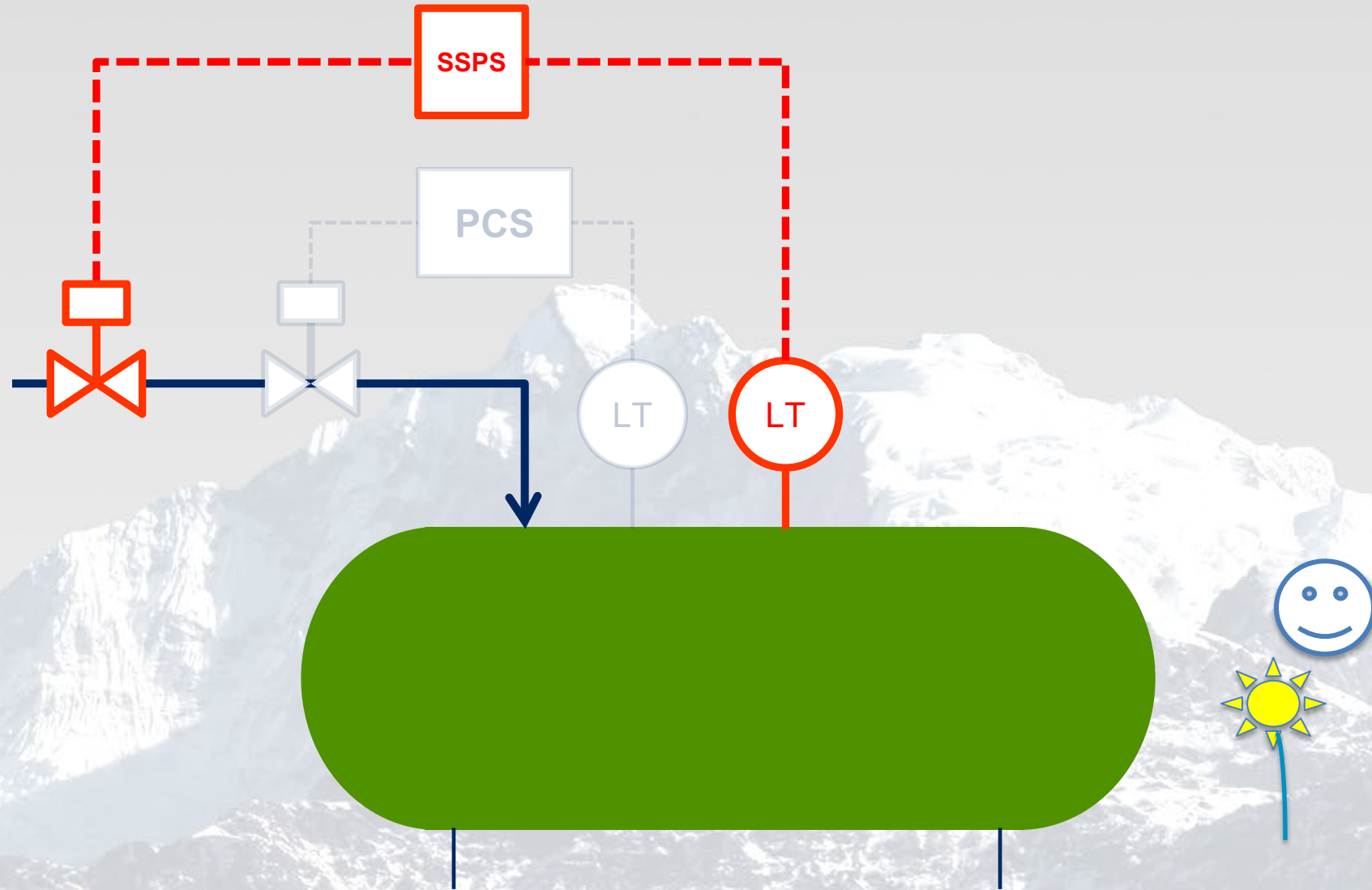
S...Severity

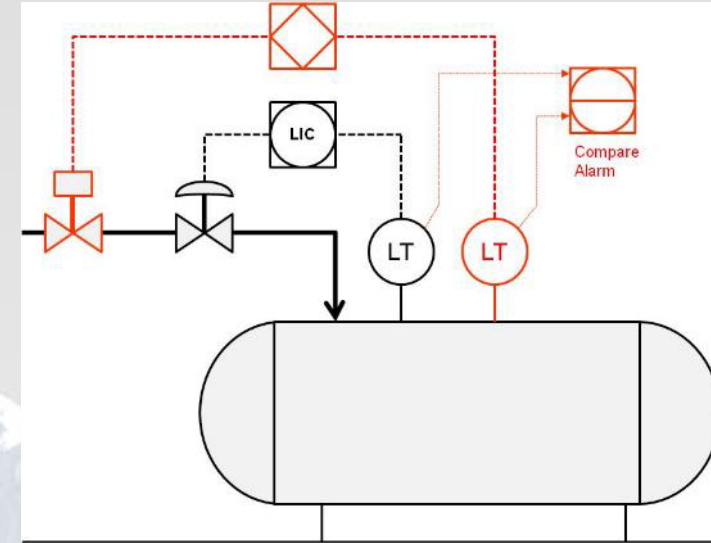
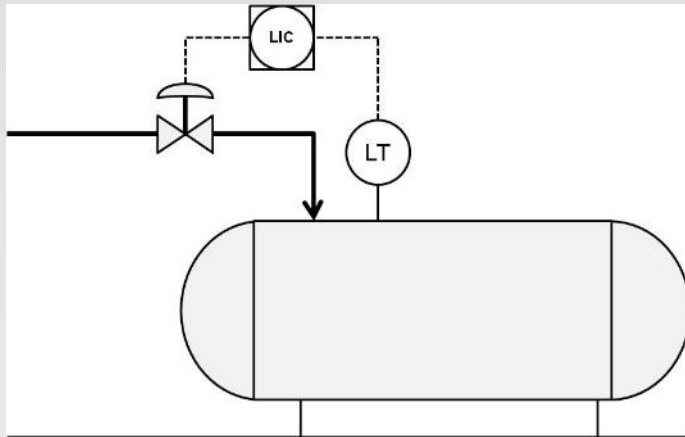
A...Exposure in hazardous zone

G...Possibility of avoiding

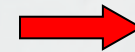
W...Probability of unwanted occurrence

SAFETY INSTRUMENTED SYSTEM (SIS)





$$\text{Risk} = E(D) \times P(D)$$



$$\text{Risk} = \text{PFD} \times (E(D) \times P(D))$$

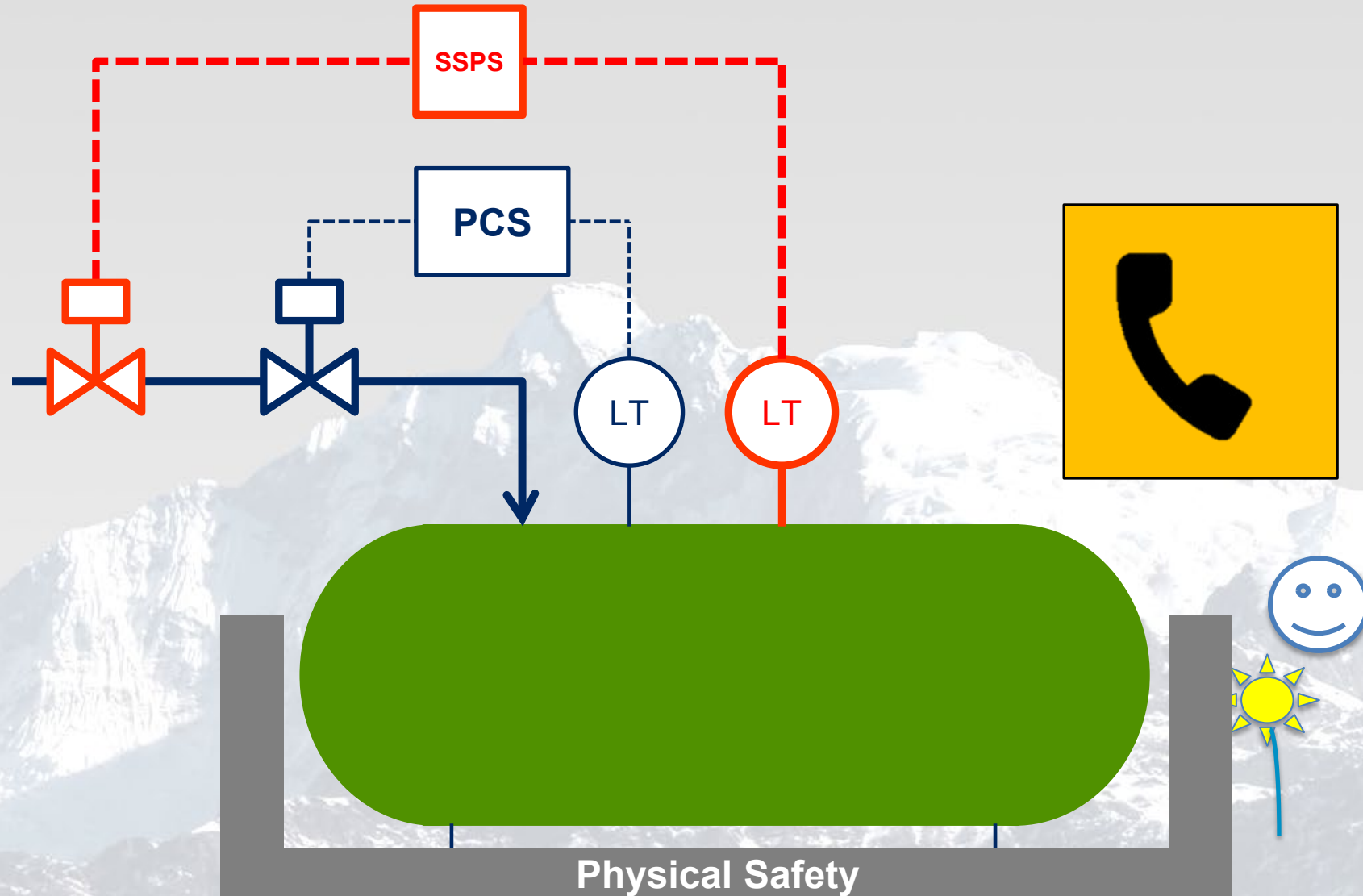
PFD	SIL
10 E-2...10E-1	SIL 1
10 E-3...10E-2	SIL 2
10 E-4...10E-3	SIL 3
10 E-5...10E-4	SIL 4

E(D)...Extend of damage

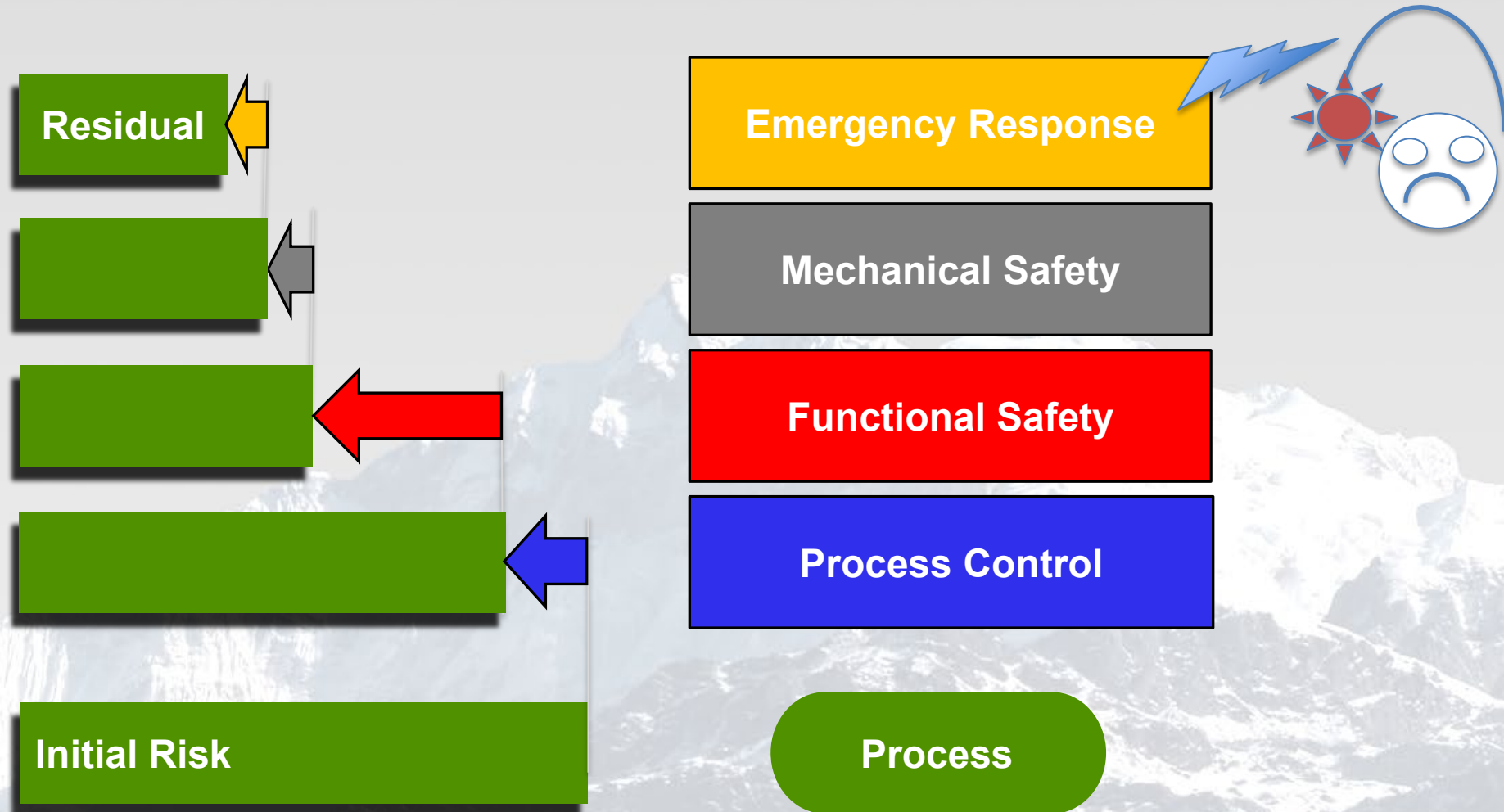
P(D)...Probability of damage

PFD...Probability of Failure on Demand

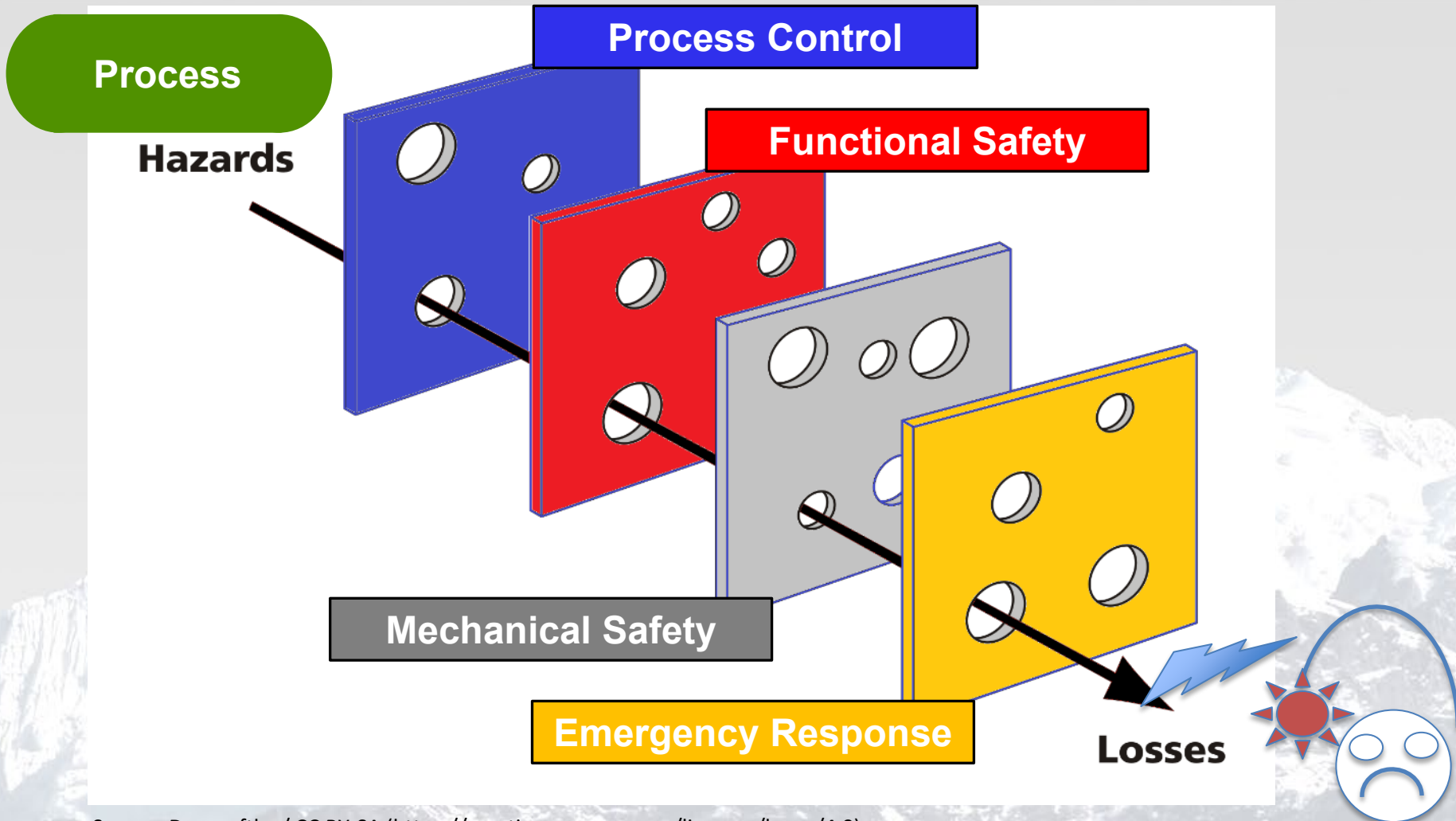
LAYERS OF PROTECTION PRINCIPLE (LOPA)



LAYERS OF PROTECTION PRINCIPLE (LOPA)



DIVERSITY AND INDEPENDENCE

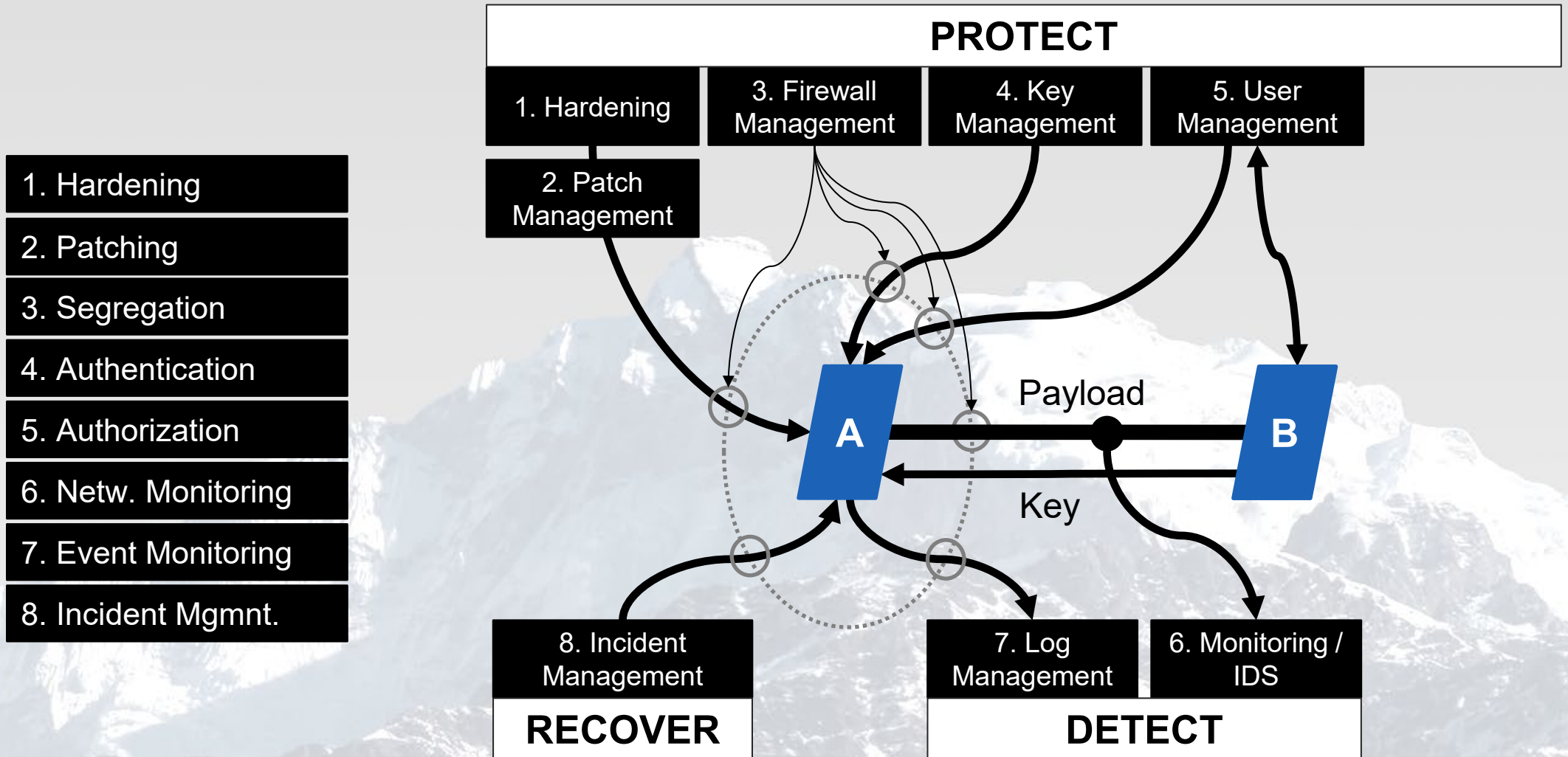


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WHY SECURITY 4 SAFETY?

- Cyberattacks on SIS possible & happend
- We are „forced“ to by EU, nation states, ...
- We want it, because we want to produce
- We know how to do it (Guidelines, e.g. NAMUR NA163)
[NAMUR Arbeitsblatt NA 163 - anapur](#)

SECURITY CONTROLS



IMI 2026

19. Mai 2026
Mafinex Mannheim

Beiträge 25:

BASF

DaimlerTrucks

ExxonMobil

Evonik

NATO

YARA

Staatliches Gewerbeaufsichtsamt Hildesheim (Niedersachsen)

Landesamt für Natur, Umwelt und Klima Nordrhein Westfalen



OT-/IT-SECURITY GET-TOGETHER

06. November 2025
Novotel Wien Hauptbahnhof

Beiträge u.a.:

ÖBB

Octapharma

Waterfall Security



www.it-meets-industry.de

DANKE!
FÜR IHR INTERESSE AN SICHERHEIT!

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