

Redundancies – when are they useful and from when on are they restricting?



Andres Bardill, mountain guide, director Swiss Alpine Rescue

Key aspects

- **Introduction and terminology with objectives**
- **Classification of redundancies in rescue organisations**
- **Examples of redundant systems**
- **Limits of redundancies**
- **Personal responsibility**



Redundancy according to the dictionary

Meaning:

- to show redundancy; overabundant

Synonyms for redundant:

- to exist several times, superfluous, surplus, supernumerary;
(colloquial) doing the same thing twice over, twice and thrice over

Origin:

- Latin redundans (genitive: redundantis), present participle of:
redundare = to overflow, originally to redound, from re-, red- = back
and unda = wave

Redundancy on wikipedia (German version)

The term redundancy, adj. redundant, (Latin redundare, “ to overflow”, “ exist in abundance”) describes:

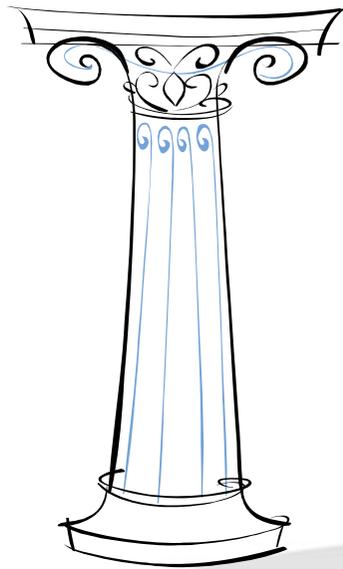
- In general an overlapping or abundance in the sense of surplus
- Redundancy (technology), the multiple existence of functionally similar or comparable technical resources (mostly for safety reasons), if they are not needed for the trouble-free normal operation.
- Rock climbing: back belaying or doubling of certain (critical) elements of the safety chain to increase security, for example the use of two karabiners to deflect the rope in top-rope-climbing.

Theses

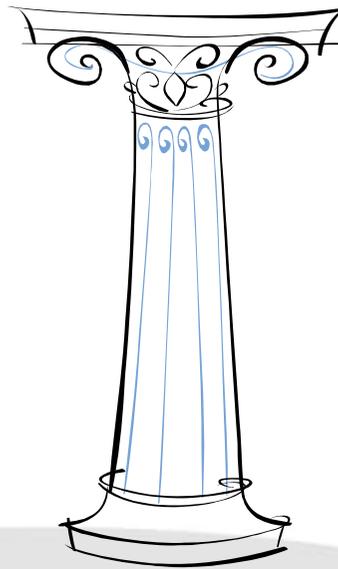
- “Abundance”, “doing the same thing twice over” and “to exist several times“ stand for redundant and are the basis of proportional risk management.
- Risk management requires the use and implementation of the power to act and to decide.
- The use of redundant systems and organisational measures is essentially based on personal responsibility.

Redundant areas

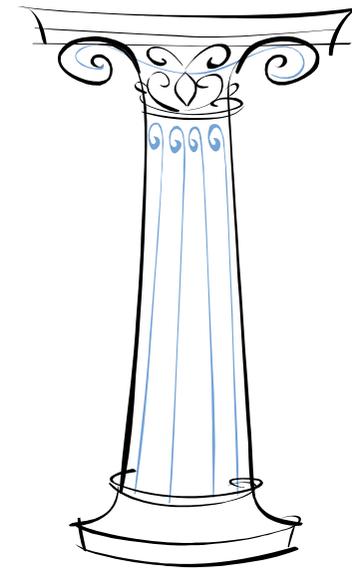
Operation and operational readiness



Resources



Logistics



Information

Operation and operational readiness



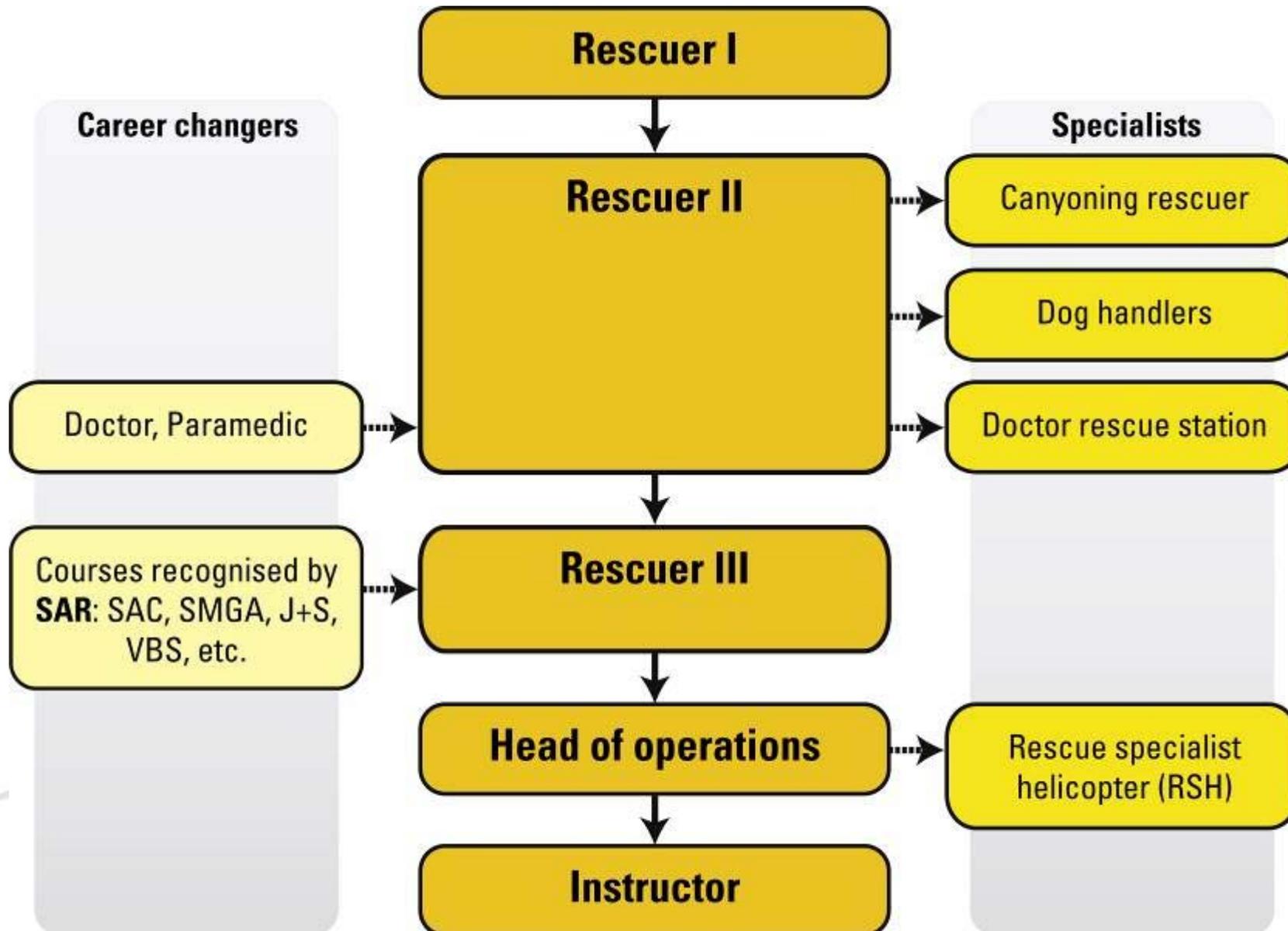
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Operation and operational readiness



Resources



Logistics



Information and communication



Limits of redundancy



Personal responsibility

Legally required personal responsibility:

- **Knowing the risk**
- **Technical knowledge**
- **Power to act and decide**
- **Capability to act and decide**
- **Possibility to act and decide**



Personal responsibility

Top team, spontaneous first aid

Technical experts (all)



Operational team rescue station

Operational leader (OLAS)



Large incident partner organisations

Operational lead (police, SAC, army..)

Citation from the magazine “Bergundsteigen” 2/11 Klaus Burger:

(originally in German)

The development in European law, taking into account the constitutional **self-determination** and **personal responsibility** of the sportsperson, including practical alpine experience and the assessment of accidents in regard of technical and legal points of view, is in the interest of all mountain sports people – not least from the point of view of legal security – utterly necessary.

An ambitious matter! Associations and authorities are challenged. Risk – why not!

