# functional:

# monitoring

# sensing

# read data

# check-in/check-out

# collecting

# storing (also raw data?)

# store check-in/check-out data

# organizing

# user rights check (run-time access control)

# analysing

# statistics

# data analytics

# 

# visualization (shows current state of areas, highlight crucial situation)

# semi-automatic actuation (implement human-assisted automatic actions)

# actuators

# non-functional:

# performance (40.000 msgs/h, has to handle up to 2.000 sensors)

# scalability

# security

# fault tolerance (critical msgs always delivered in at most 5 sec)

# availability

**constraints:**

* use REST APIs

**assumptions:**

* dedicated network availability

**risks - critical aspects:**

* network availability
* critical msgs delivery
* big-data storage
* power outage
* sensor failure [!!!]

# questions:

# what does it mean to be configurable (for the dashboard)?

* weight/kind of incoming data?
* data ttl?
* when the data should be analysed (batch/runtime)?
* kind of data analysis?
* what does it mean run-time access control/user right check?
* potential services?