

# 2016/2/3: BACnet as a requirement in a military environment

## BACnet as a requirement in a military environment and as an opportunity for more efficiency

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Whenever existing building automation installations have to be redeveloped or upgraded, proprietary systems often cause considerable additional costs because of lacking business rivalry, and sometimes energy saving potentials cannot be exploited. If your company disposes of many automation stations, you ought to busy yourself with BACnet. BACnet is an interoperable protocol for building automation (GA). GA covers the entirety of surveillance, control and optimisation installations in buildings. GA not only covers areas such as heating, ventilation, air-conditioning, sanitary and electrical installations (HLKSE), but also issues assigned to safety, like fire protection, and to security, such as access control. The red thread from BACnet to safety and security management, and subsequently to the military, can hence be made by defining the term. The trisection into physical security, network security and applications security depicted in the security chapter records the relevance of this issue for military use as well. The real importance of BACnet for the military can be especially deduced from the comprehensive security concept. Comprehensive security as described by Barry Buzan not only comprises a narrow sovereign definition of security, but has a holistic approach. Standards and interoperability represent an opportunity to reduce dependencies on a producer, to better benefit from technological developments, to reduce the life-cycle costs of building automation, and to reduce security risks. Facility management experts assume that 80 to 90% of the costs accrue from the life-cycle of the property during its operating life. One important expense factor is energy expenses, which also are in the focus of building automation. Optimised processes, such as building information modelling (BIM), help to find new possibilities to increase efficiency in the energy consumption environment, together with building automation. The more standards and standardised processes are introduced in GA, the easier it will be possible to actually profit from efficiency potentials during operating life (exchange of components, saving of energy, improvement of conveniences, etc.). The efficient advantages of business rivalry can only be exploited, if the property-specific GA- and BACnet-requirements (addressing, GA-functions, services, and networks) are sufficiently defined during project planning already, and if their implementation is competently monitored by the client, for otherwise abuses would be possible. Only if building automation is regarded comprehensively and aspects of planning, functionality, efficiency, interoperability, security and operation are in accordance with property- and organisation-specific requirements, GA and BACnet will be able to contribute to efficient and effective processes in the organisation. The main point, however, is that the advantages of BACnet are made accessible to a wide community. In this way they will not remain knowledge of a few specialists only, like at the moment.

