FEBRUARY 15th

09:00 – 09:30 REGISTRATION
09:30 – 11:30 LECTURES (breaks in between)
11:30 – 12:30 LUNCH
12:30 – 16:30 LECTURES (breaks in between)

19:00 DINNER

TOPICS OF THE DAY:

The basic idea of an open, interoperable communication standard for building automation

The BACnet committee with ISO/CEN servicing contract: ASHRAE SSPC 135
Introduction of the world standard EN ISO 16484-5
BACnet world-wide: interest groups and their web pages: BACnet Interest Group Europe, BI, BTL
Trade fairs with BACnet communal booths, reference projects, literature, journals

BACnet DATA Link Layer (Whereby is communicated?)

BACnet in the ISO/OSI reference model
The standardized data communication methods
Representation of the network topologies, gateways, router
Explanation of a BACnet network example
The three most important data-link-layers: BACnet/IP, MS/TP and BACnet/SC

The BACnet language" and its components (How does BACnet work?)

Introduction to standardized object types
Presentation on communication services with access functions and groups
Special functions like value-discrete transmission (COV – Change of VALUE) based on threshold values
BACnet incident and alarm management, object-internal and rule-based messages (Intrinsic and Algorithmic Change Reporting), message classification
BACnet procedures for command prioritization
Calendar and time-schedule functions with BACnet
Data recording with the help of the BACnet trendlog /trendlog-multiple objects

The (automatic) data flow control in the network

Referencing BACnet objects
Discovering devices on the network
The application of object names, using key names
BACnet project management and "offline" configuration
Using the EDE-file
Project overview using B-PAT file

FEBRUARY 16th

08:30 – 15:30 LECTURES (breaks in between)
11:30 – 12:30 LUNCH
12:30 – 15:30 LECTURES (breaks in between)

TOPICS OF THE DAY:

Specifying BACnet in tenders
BACnet is not Building Automation!
Building Automation as the basis for interoperable communication

Why it is important to specify BACnet as detailed as possible
Documents to support project-designers specifying tenders (NIST-IR 6392, AMEV, KBOB)
Comparing devices: Manufacturer's declaration "PICS" and "Epics"
The role of certification, BTL-mark and the ongoing BACnet update process
Conformance testing, what does a certificate cover, what does it not cover?
Working with the "BIBBs" BACnet Interoperability Building Blocks
Presentation on the device profiles
Responsibilities in multi-vendor projects

Network Security in building automation systems
Why network security matters
Don't do's when connecting BACnet network through the internet
BACnet Secure Connect how does it work, how to specify network security

Troubleshooting, Analyzing BACnet networks

Using Wireshark and other tools to detect BACnet problems
Using BACnet in an IT-network, explaining the IT what we do in their networks
Other BACnet tools

Questions and Answers