

# Open for BACnet

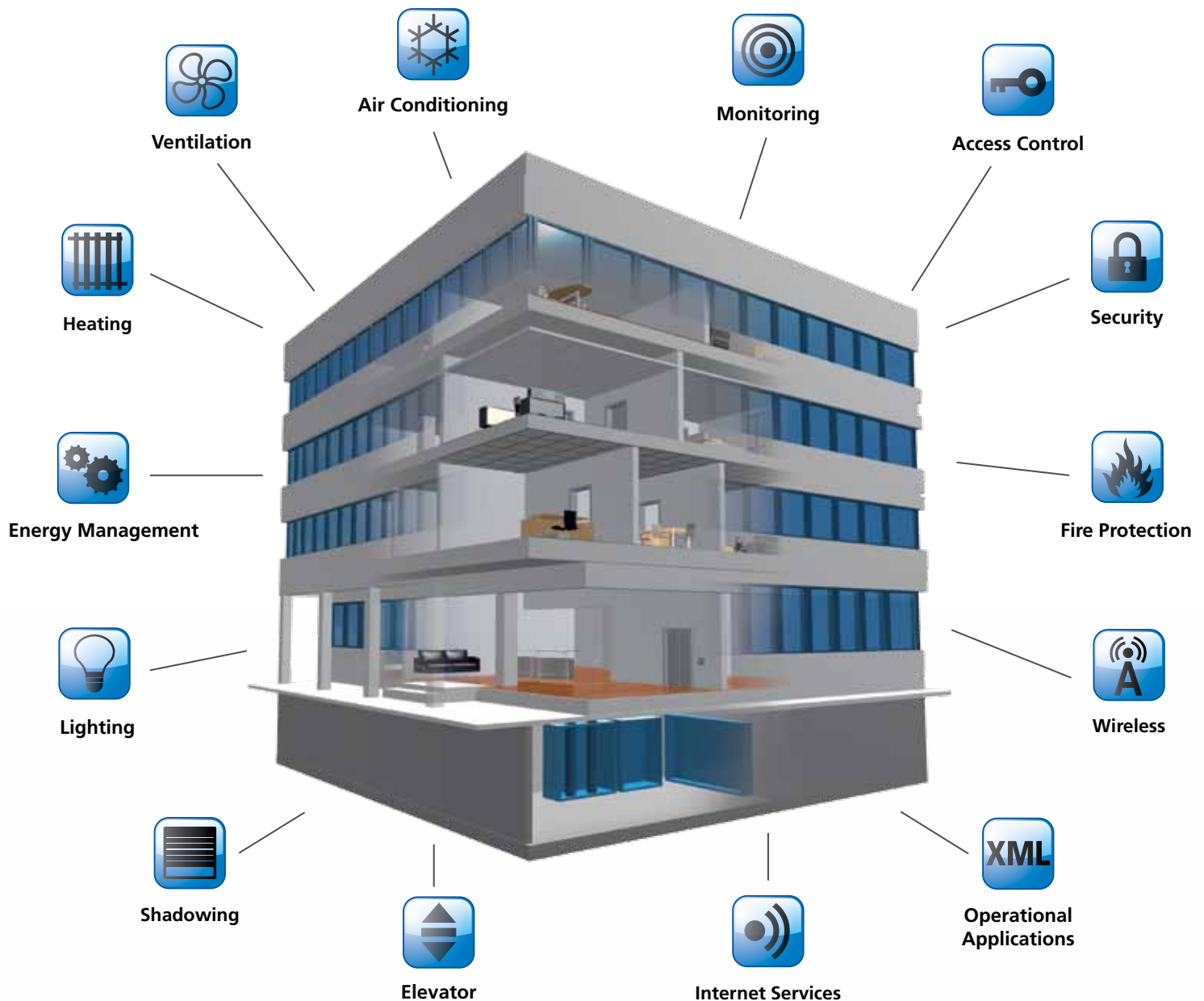
BACnet – the global standard



## ISO 16484-5

- Increase Energy Efficiency
- Lower Operational Costs
- Secure Investment Protection
- Support Sustainability
- Provide Independence

# BACnet – Intelligent Communication for Efficient Buildings



■ Mike Newman developed an open computer for the various automation systems at Cornell University, USA

1985

■ First standardization in the USA  
■ BACnet becomes ANSI/ASHRAE standard 135-1995

1995

■ Foundation of BIG-EU  
■ EN V 13321 (automation level)  
■ Beginning of global standardization  
■ ISO TC 205 WG 3

1998

■ First BACnet booth at the light+building  
■ First BIG-EU BACnet training

2000

1987

■ ASHRAE constitutes BACnet Committee SSPC 135

1997

■ Beginning of standardization in Europe  
■ EN V 1805-1 (management level)

1999

■ BACnet Symposium in London

# BACnet – the Key to Integration

BACnet is a neutral communication standard for building automation. It enables data exchange between building systems from different manufacturers. It supports the interoperability of various components and systems.

This makes BACnet suitable for the integration of all applications such as HVAC, security technology, access control and both, lighting and shadowing control. Further functions as for instance energy management, elevator management, internet services and data exchange with operational applications are being taken into consideration as well.

BACnet technology plays a key role in the equipping and controlling of efficient buildings. The unitary communication standard simplifies and supports the integration of different systems. Energy consumption can be lowered to a minimum – without loss of comfort, safety and security. Thereby BACnet creates the prerequisite to sustainably lower operational costs. Also, costs of investment are kept at bay, as even manufacturer customization and expansion are possible at any time.

This secures the connection to technology that is both, state of the art and most efficient.

## BACnet profile

### Added Values

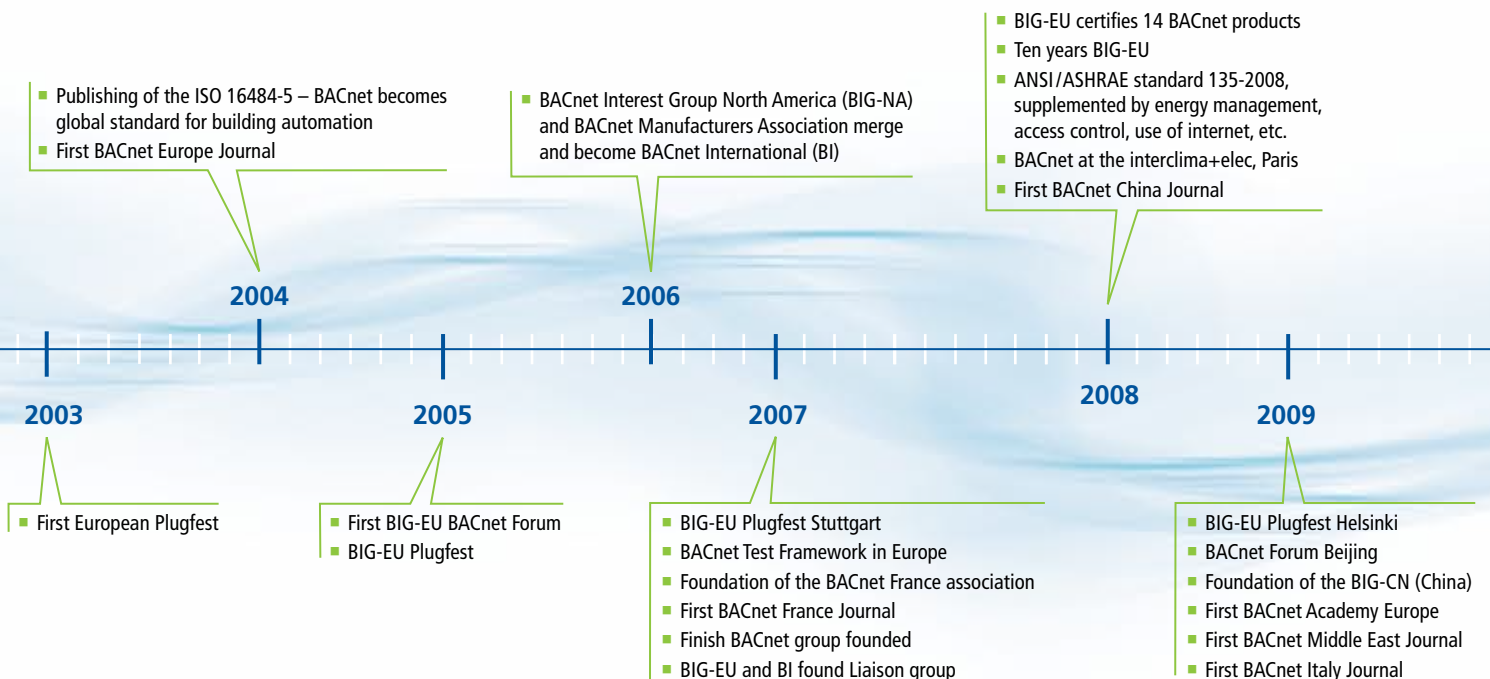
- Globally standardized data communication for building automation
- Technology-independent
- Manufacturer-independent
- Tested by independent testing laboratories
- Continuous expansion
- Most comprehensive protocol specification for building management systems
- Continuous functional communication between building management system, automation stations, sensors and actuators

### System Integration

- Heating, ventilation and air-conditioning (HVAC)
- Light control
- Security technology and fire alarm technology
- Lift monitoring
- Access control
- Energy management and energy services
- Internet services
- Operational data (XML)
- Wireless applications

### Supported Media

- BACnet/IP
- MASTER-SLAVE/TOKEN PASSING (MS/TP) LAN
- ISO 8802-3 („Ethernet“) LAN
- ARCNET LAN
- EIA/CEA-709.1 („LonTalk“) LAN
- POINT-TO-POINT (PTP)
- ZigBee



# BIG-EU – Increase Building Management while Decreasing Costs

BACnet has developed to become the global standard of building automation within a very short time. After the foundation of the BIG-EU things improved fast, first in Germany then all over Europe. Proprietary systems which had been prevailing until then were edged out.

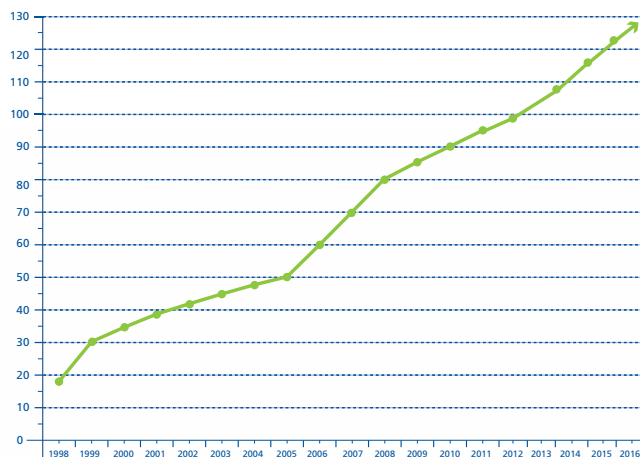
Driven by the combined forces of manufacturers, planners, and property operators the BIG-EU has fundamentally supported the development of BACnet to become a world standard. By joining the BIG-EU the members position themselves as experts for the open

standard. Corporate marketing, jointly developing technical guidelines and the creation and utilization of qualification possibilities support the continuous exchange between users and developers – an important foundation to further improve the BACnet standard and adjust it to new requirements.

When developing the BACnet standard BIG-EU represents the interests of the European market. Expansions and adjustments are brought to the globally staffed standardization committee responsible for BACnet, the ASHRAE committee “SSPC 135”.

## The BIG-EU – On Course for Growth

### Membership development



Founded by 18 companies in 1998. The BIG-EU looks back on a fast and steady increase of membership numbers. To this day, 125 members support and assist the development and application of BACnet standard. They recognized the strategic importance of BACnet and profit from the combined expertise of developers, professional planners, integrators and consulting experts.

Members originate from all over Europe and increasingly beyond. Represented companies are from Belgium, Denmark, Germany, England, Finland, France, Ireland, Italy, Netherlands, Norway, Austria, Poland, Sweden, Switzerland, Czech Republic, Canada and USA.

- 425 BACnet providers reported worldwide – doubled in four years
- Conformity tests worldwide with BACnet Test Framework
- BACnet Exhibitions worldwide in Orlando, Paris, Milan, Frankfurt, Shanghai, Dubai
- 10<sup>th</sup> BIG-EU BACnet Forum

2010

- Worldwide BACnet Presence on fairs in Chicago, Frankfurt, Milan, Paris, Stockholm
- BACnet Forum Amsterdam
- BACnet Academy Stockholm
- BIG-EU Plugfest Dortmund

2012

- 10 years ISO standard
- BACnet/OPC-UA mapping
- Global accreditation of testlabs
- BACnet presence at trade shows in Essen, Frankfurt, Hannover, New York, Paris
- BIG-EU Plugfest Zug

2014

2011

- Certification globally harmonized
- Worldwide BACnet Presence on fairs in Frankfurt, Paris, Guangzhou
- BACnet Forum London
- BACnet Forum Hong Kong

2013

- 100<sup>th</sup> member of BIG-EU: Fraport AG
- 636 BACnet providers reported worldwide
- BIG-EU Plugfest Berlin

2015

- 125 members / 875 BACnet providers worldwide
- Five BACnet Academies
- BACnet exhibitions worldwide
- BIG-EU Plugfest Turin
- Encouragement BIG-ME and BIG-PL
- Cooperation Fairhair Alliance



# Joint Success Together with BACnet

## BACnet Joint Booths and Exhibitions



Chicago



Paris



Frankfurt



Frankfurt



Dubai



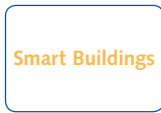
Milan



Cologne



Zurich



's-Hertogenbosch



Nizhny Novgorod



Nordbygg



Security Essen

## Certification of Conformity to the BACnet Standard



## European BACnet Interoperability Workshops

- Stuttgart 2003
- Stuttgart 2005
- Stuttgart 2007
- Helsinki 2009
- Saarbrücken 2010
- Dortmund 2012
- Berlin 2013
- Zug 2014
- Turin 2015



## BACnet Academy Europe



- Amersfoort
- Amsterdam
- Birmingham
- Brüssel
- Kopenhagen
- Lissabon
- Luzern
- Mailand
- Oosterhout
- Oslo
- Stockholm
- Warschau
- Zürich

## Internationale BACnet Foren und Roadshows

- Berlin 2005
- Krakau 2005
- Amsterdam 2006
- Mailand 2006
- Zürich 2007
- Paris 2007
- Wien 2008
- Mailand 2008
- Peking 2009
- Frankfurt 2010
- Shanghai 2010
- London 2011
- Hong Kong 2011
- Amsterdam 2012
- Paris 2014
- Roadshow Seattle 2015
- Roadshow Abu Dhabi 2015
- Roadshow Warschau 2015
- Roadshow Berlin 2015



## BACnet Journale:

BACnet Europe Journal

BACnet France Journal

BACnet Middle East Journal

BACnet International Journal



# Members



www.big-eu.org



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