CABA Board of Directors and Vision

CABA Vision Statement

“CABA accelerates growth in the connected home and intelligent buildings sectors.”
The Continental Automated Buildings Association (CABA) is an international not-for-profit industry association, founded in 1988, dedicated to the advancement of connected home and building technologies.

The organization is supported by an international membership of over 325 organizations involved in the design, manufacture, installation and retailing of products relating to home and building automation.

Public organizations, including utilities and government are also members. CABA's mandate includes providing its members with research, services and networking opportunities.

CABA also encourages the development of industry standards and protocols, and leads cross-industry initiatives.

CABA maintains the largest “connected home and intelligent buildings” research library in the world.
For more information on this research project, go to:
What is an Intelligent Building?

- Fire & Life Safety
- Security & Intrusion Detection
- Energy Management & Demand Response
- 24/7 Monitoring & Control
- Lighting Controls
- Access Control & Video Surveillance
- Elevator Control
- HVAC
- Communications Voice/Video/Data
- Parking Management
- Digital Signage
- People/Asset Management

Intelligent Building Network

Source: Compass Intelligence, 2015
“Intelligent Buildings are part of an increasingly integrated build environment.”

Source: The IET – The Institution of Engineering and Technology
Convergence of IP-Based Infrastructure

- Building Services
- Accommodation Services
- Business Services

Source: The IET – The Institution of Engineering and Technology
Case Study – IP Based Systems – Sports Stadium

Source: The IET – The Institution of Engineering and Technology
Risks Arising from Compromised Systems

Corporate IT systems

- Financial Integrity
- Denial of Service
- Loss of Information

Building Systems (ICS)

- Loss of view
- Loss of control

Impact on systems

Financial and reputational risk

Safety and operational risk

Source: The IET – The Institution of Engineering and Technology
<table>
<thead>
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<th>CRIMEWARE</th>
<th>CYBER-ESPIONAGE</th>
<th>DENIAL OF SERVICE</th>
<th>PHYSICAL THEFT/LOSS</th>
<th>MISCELLANEOUS ERRORS</th>
<th>PAYMENT CARD SKIMMERS</th>
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Source: 2015 Verizon Data Breach Investigation Report
Four Options:

1. Avoidance
2. Reduction
3. Sharing the Risks
4. Retention and Manage Consequences

Source: The IET – The Institution of Engineering and Technology
Security Zones and Conduits

- Solutions developed during the design phase.
- Proposed design should be assessed for new ideas.
- BMS application needs networked segregation (firewall).
- Secure gateway protection (data diode secures BMS).

Source: The IET – The Institution of Engineering and Technology
Cybersecurity Responsibility Paradigm

- Manage interaction between infrastructure and business systems.
- Need clear operating procedures and agreed “best practices”.
- Need to be based on recognized standards (e.g., ISO 27001).
- Legal issues – lease/tenancy agreements covering data protection, human rights, etc.
- Insurance policies need to be revised and possibly updated.

Source: The IET – The Institution of Engineering and Technology
Global Cybersecurity Expenditures, 2015-2022

$75.8B - $160.6B

Source: Compass Intelligence, 2015
Percent of Revenues by Region for the Global Cybersecurity Market, 2015

<table>
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Source: Compass Intelligence, 2015
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