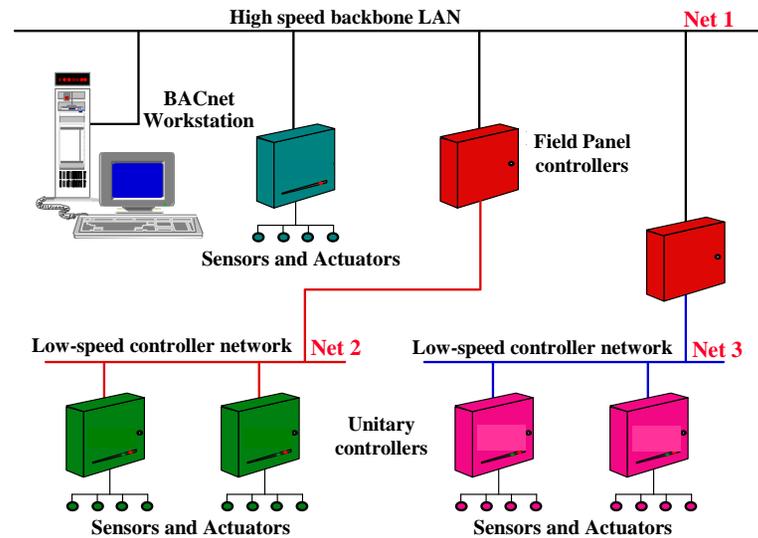


# Emerging Building Automation Technology and its Impact on Emergency Response

Steven T. Bushby

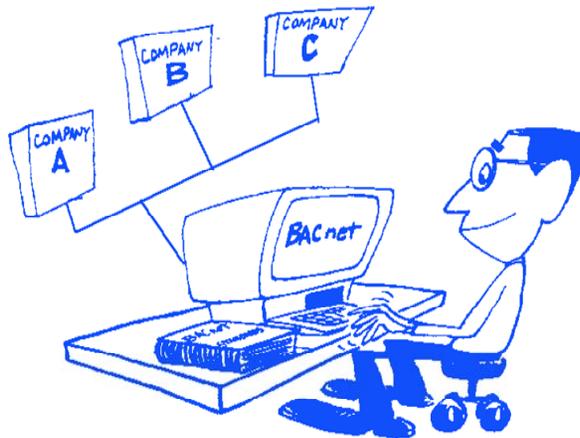


## Why Integrate Building Automation Systems?

- Competitive bidding projects
- Single seat operation
- Reduced operator training costs
- ...

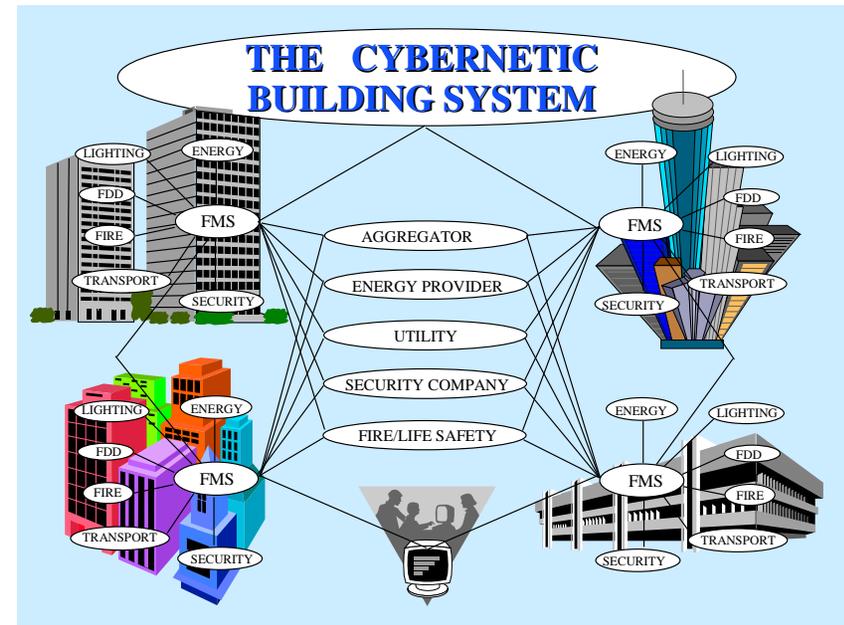
## Why Integrate Building Automation Systems?

- Interconnect HVAC, fire, lighting, & access control systems for more efficient operation
- Tenant billing
- Shared sensor data
- Link multiple buildings



A Data Communication Protocol  
for **B**uilding **A**utomation and  
**C**ontrol **N**etworks

Only standard protocol  
specifically for buildings.



## BACnet – Embraced Around the World

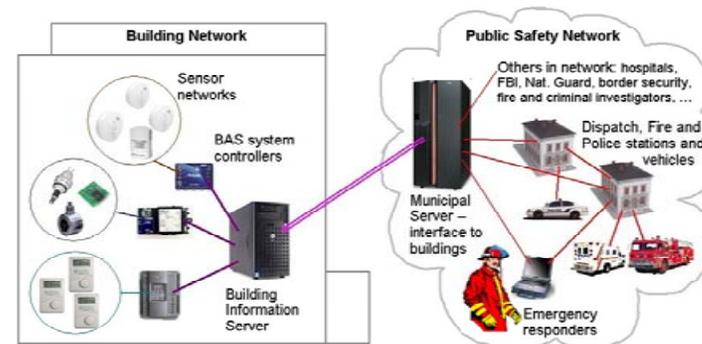


## Exciting BACnet projects are happening all over the world



Buildings have a lot of information that could aid an emergency response!

Why does building automation technology matter to emergency responders?

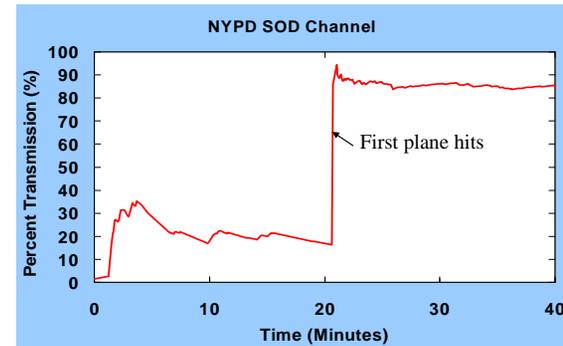


[www.bfrl.nist.gov/ibr](http://www.bfrl.nist.gov/ibr)

## Integrated BAS Enable development of decision support tools



Can building automation systems assist in voice communications within a building?



WTC public safety dispatch comm channel

## Summary

- Communication standards for building automation are being adopted around the world and increasingly used in real products
- Integrated building automations systems based on standards can be an asset to emergency responders