COMMUNICATION BY ALARM SYSTEMS

Alarm Systems are designed to accomplish two aims.

1 Sense or Detect a change in condition - Example of conditions: TEMPERATURE, MASS, PRESSURE, MOVEMENT, VOLUME, TIME, ELECTRIC CURRENT, SOUND, LIGHT,

2. Alert to the conditions change - The alert can be local only (Local Alarm) or transmitted to a remote location (Monitored Alarm)

Local Alarm alerts are locally audible or locally visual - annunciation of the condition change is a distinctive change in sound, a change in lighting or a visual change of motion.

Monitored Alarm alerts are transmitted by various modes of communication to a remote location. At the remote location, alerts are annunciated audibly or visually.

Transmission modes may be electric current over wires, variations of radio communication, the Internet. The message form may be analogue or digital.

These modes range from inexpensive to significantly expensive. The mode impacts monitoring cost.

- Some modes increase cost with increased use; the more activity, the higher the cost.
- With some modes activity is unlimited; cost is not impacted.

Alarm panel communication requirements fall into two categories SUPERVISED (Active) and UNSUPERVISED (Passive). Supervised communication is accomplished with a continuous transmission assuring a viable message path. Unsupervised communication (passive) only transmits when the alarm detects a change in condition. System application role dictates the Standard !

95% OF TODAY'S ALARM SYSTEMS, MAKE PHONE CALLS

ALARM PANELS THAT MAKE PHONE CALLS ARE IMPACTED BY CHANGING TECHNOLOGY!
TELCO ELEMENTS IN THE COMMUNICATION CHAIN TRANSITIONING TO VOIP CORRUPT ALARM RECEIPT DAILY

THESE SYSTEM MUST TRANSITION TO ANOTHER MODE

Contact your alarm dealer for guidance
ASSURE FUNCTIONING WHEN NEEDED

This guidance for Safety and Wellbeing is brought to you by Oregon Burglar and Fire Alarm Assoc. OBFAA

Recommendations are those of the Security Industry Association (SIA)

TRANSITION OPTIONS:

INTERNET- Supervised and Unsupervised capable
PROS:
If location IP is active - no significant transmission cost, dynamic or static connections acceptable, reasonably priced transition device, likelihood need to upgrade - minimal (will be functioning 50 years from now), can interface with existing system - add not replace

CONS:
Provider network infrastructure viability (only as reliable as IP network), requires emergency power for router, vulnerable network access,

MESH RADIO - Supervised and Unsupervised capable
PROS: Access to network - no additional cost beyond transceiver acquisition, communication path redundancy (high reliability), least susceptible to power failure and natural disasters, secure network access, no significant transmission cost, likelihood need to upgrade - minimal (will be functioning 50 years from now), can interface with existing system - add not replace

CONS:
Must have access to a viable network, highest cost communication device,

CELLULAR / GSM - Supervised and Unsupervised
PROS:
Viable wherever there is cellular network, reasonably priced communicating device, reasonable communication cost in passive mode, secure network access, can interface with existing system - add not replace

CONS:
High communication cost if Supervised or high active account if Unsupervised, need to replace equipment with cellular technology development

Home and most Commercial alarms will be well served by Internet Communication, Mesh Radio Networks, or Unsupervised Cellular / GSM. Some commercial accounts have services that generate high activity exp, Open/Close

MANDATED FIRE ALARM SYSTEM - National Fire Protection Association (NFPA) Standards
Applications of Internet, Cellular (GSM) in the SUPERVISED application or Mesh Radio application are generally accepted as the sole transmission mode. Internet and Cellular (GSM) in redundant transmission application may be accepted as an economical communication solution.

SEEK APPROVAL OF THE AUTHORITY HAVING JURISDICTION (AHJ) - your local Fire Marshal !