The implementation of the Next Generation 9-1-1 (NG9-1-1) network does not require that a PSAP upgrade Customer Premise Equipment (CPE).   The 9-1-1 Program will install the network and the associated hardware at every PSAP as part of the cost of the new network. This hardware will convert the Internet Protocol (IP) signal to analog signal so your current levels of CPE will continue to work with the new network.

Customer Premise Equipment (CPE) will undergo many changes over the next six to 18 months. Many of the Next Generation (NG) interfacing requirements that NENA references as i3 interfaces are not completely defined by the industry forums, such as the National Emergency Number Association (NENA), Association of Public-Safety Communication Officials (APCO), and the Emergency Services Interconnection Forum (EISF).

However, although final technical details have not been ratified, several CPE manufacturers are in the process of developing NG solutions envisioned to support evolving requirements. And despite that final NG CPE technical specifications are not fully developed, the high-level design requires that CPE equipment be interfaced to the NG Network via an Internet Protocol (IP) technology known as Session Initiation Protocol (SIP).

The goals of the 9-1-1 Program are to support ratified industry standards supported by NENA and ESIF wherever possible, and to allow for open and fair competition so public safety professionals have good options to match their needs. Since Minnesota is again an early adapter, this goal may be challenging at times but is the best way to serve the public safety community.

In this ever-changing technology environment, ECN recommends that any new investment in CPE include contract language to protect your investment. The three following suggestions are specifically recommended for incorporation in contracts with CPE vendors/manufacturers. If vendors/manufacturers are willing to incorporate the considerations in a contract, CPE purchases should be well-protected.

- Ensure that the hardware and software of your CPE equipment will meet nationally recognized Next Generation standards. A great deal of work is occurring to ensure there will be adopted standards on which manufacturers can build. National organizations such as NENA, APCO and ESIF are working with manufactures to agree on NG standard interfaces to the IP network and to new types of services that will become available. Responsible CPE manufacturers should develop solutions that would only require minor software modifications to adopt these interface standards. It could be very costly to discover that major modifications are required to revamp their products, so most manufacturers are taking an active part in these forums. Consider contract language that states "the vendor/manufacturer will support i3 interfaces as ratified by ESIF and APCO and NENA."

Most vendor/manufacturers will probably agree to meet these standards when defined — but at what cost remains to be determined:

- To protect your PSAP from unknown costly upgrades, consider adding contract language that states, "the price of the NG upgrade will not exceed 25 percent (or other negotiated percentage, i.e., 5 percent, 10 percent) of purchase value." Be aware that maintenance contracts may not include the costs of software enhancement, hardware additions or labor required to add NG features.

- Many CPE manufacturers are being sold to other companies with existing CPE brands. As a result, some future hazards might include: manufacturers discontinuing hardware support; software enhancements forcing hardware upgrade to a different platform or purchase of new equipment before obsolescence. PSAPS might consider a contract negotiation including a signature from an officer of the vendor/manufacturer and a "guarantee in writing that the product to be purchased will be supported (hardware maintenance and software enhancements) over the next 10 years (or other negotiated timeframe i.e., five years, eight years)."

Please contact and utilize ECN staff to advocate on your behalf with vendors/manufacturers.

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More information about this project is available at: http://dps.mn.gov/divisions/ecn