Why NG9-1-1?

The purposes of NG9-1-1 can be briefly described in four segments:

1) Fully replace Enhanced 9-1-1, with all capabilities and functions in place today

   We cannot accidentally drop even detailed standard features of E9-1-1 as we change over to a new base technology (IP) and entirely different software based and database control mechanisms to perform 9-1-1 system capabilities and features, for both callers and PSAPs. This applies right down to seldom used but critical features for dealing automatically with real time call routing and delivery problems, or troubleshooting of call and data issues. All current originating service types must continue to be supported seamlessly, with no service dropout during the transition from E9-1-1 to NG9-1-1.

2) Add capabilities to support changes for current and new types of Originating Service Providers

   E-1-1 supports voice calling for wireline, cellular, and VoIP service providers today. There are current and certainly future needs for different and new calling technologies, including non-voice messaging of various types, devices generating data-only messages (such as sensors), photo and video transmission, and unknown future services. A primary objective is to establish a common, IP based interface that developers can design to as they develop new services, so that 9-1-1 can be planned for and then connected to quickly as 9-1-1 call and message generating services are introduced to the public.

3) Add flexibility for the PSAPs and 9-1-1 Authorities

   These range from the ability to transfer calls, messages, and data between any PSAPs on any interconnected NG9-1-1 system anywhere in the country (and beyond), ability to directly activate alternate routing much more quickly, to controlling data flow. The PSAP will be able to access a wide range of supportive databases and share new and more robust forms of data to facilitate call processing, emergency response and comprehensive incident management. Basic tools to support disaster related 9-1-1 call control and to handle non-voice call types are also involved.

4) Add capabilities to integrate and interoperate with emergency entities beyond the PSAP

   Other emergency and public safety related entities will be able to interconnect to the NG9-1-1 network and system, and be able to receive calls and data sent by the NG9-1-1
system or PSAPs, as well as (with access controls) acquire and pass data between all entities. Inherent in this portion is support for disaster management and intercommunications with and between PSAPs, EOCs, DHS, and other emergency management entities.

All of the above four areas of system development also require that many policy, educational and operations issues be treated as part of the overall Project prior to implementation. The addition of capabilities beyond those of today’s E9-1-1 systems, for instance, drive needs in these areas that are not easily derived from past practice or experience. System and procedural tools are required to support 9-1-1 Authorities and PSAPs, and to deal with additional data sources, different types of calling technologies and changes in call processing times at the PSAP, and new features that require new procedures. A variety of educational products are required to allow understanding, and support preparation, smooth transition and ongoing operation of NG9-1-1. Guidelines and recommendations for the transition of stakeholders to NG9-1-1 are critical. All of these aspects are represented and, as additional perspectives occur, periodically updated in the development activities in the NG9-1-1 Project plan.

RCH 2/2009