

Future Steps for the Evolution of E9-1-1: Immediate, Migratory, Long Term NG9-1-1

The `I` terms below are the abbreviations used by the NENA VoIP/Packet Technical Committee in referring to the sequence of development and methods to integrate IP into E9-1-1 design.

Immediate methods for Voice over Internet (I1)

Route Voice over Internet calls to the correct PSAP outside the current E9-1-1 system network, optionally with caller ID. No mechanized ALI provided.

(there is at least one commercial solution that sends caller address to a PSAP PC, but not full ALI)

Intermediate methods (pre I2) – see note below*

Migratory (Interim) solution for VoIP* (I2)

Route Voice over Internet and other types of VoIP calls into the current E9-1-1 systems and to the correct PSAP with correct ANI and ALI, accommodates both stationary and nomadic users, provides MSAG valid location information. Provides a method for nomadic user location either through an automated process or user input via a service prompted web based form or equivalent. Mobility (wireless VoIP) not supported beyond base station location identification. Provides a single industry adopted solution.

IP-based full E9-1-1 solution (Long Term, I3) = Next Generation 9-1-1

Enable end to end IP based E9-1-1 design, supporting VoIP originated call delivery, and the transition of current wireline and wireless service providers to IP interface technology. Support IP mobility users, and all capabilities of I2. Utilize extended capabilities of IP to provide location and other information with the call, as well as other sub-sets of relevant data (Future Path Plan tier 3 and beyond).

Provide a standard NG 9-1-1 solution which incorporates all requirements of E9-1-1, and the potential to easily support future IP-based communications devices.

*Note: Solutions that could be termed `pre I2` are also appearing prior to the availability of full I2 interim solutions, as expected. These pre-I2 cases are subsets of the I2 characteristics and may not support device based location data capabilities, such as in some IP PBX designs. There are several technical methods for `pre I2` interface to current E9-1-1 systems.