NENA NG9-1-1 "end-state" Assumptions

- Access Network Providers (e.g.: DSL providers, fiber network providers, WiMax providers, Long Term Evolution (LTE) wireless carriers, etc.) have installed, provisioned and operated some kind of location function for their networks. Location functions are critical for 9-1-1 calls originating on an IP network because it provides a 9-1-1 valid location to IP clients that bundle their location in the SIP signaling to the ESInet.

- All calls entering the ESInet are SIP based. Gateways, if needed, are outside of, or on the edge of, the ESInet. IP services that are not native SIP based, have protocol interworking to SIP prior to being presented to the ESInet.

- Periodic revalidation of civic location against the LVF is also needed to assure that location remains valid as changes in the GIS system that affect existing civic locations are made.

- All calls entering the ESInet will normally have location (which might be coarse, e.g., cell site/sector) in the signaling with the call.

- Transition to i3 is complete when the existing Selective Router and ALI are no longer used. Even after that time, some PSAPs may not have upgraded to i3. The i3 architecture describes a Legacy PSAP Gateway (LPG) to interface between the ESInet and a legacy PSAP. The LPG supports the origination of an emergency call through the ESInet to a legacy PSAP as well as the transfer of an emergency call from/to an i3 PSAP to/from a legacy PSAP.

- 9-1-1 authorities have transitioned from the tabular MSAG and ESNs to GIS based Location Validation Function (LVF) and Emergency Call Routing Function (ECRF).

- Since the legacy circuit-switched TDM network will very likely continue to be used for the foreseeable future (both wireline and wireless,) the i3 architecture defines a Legacy Network Gateway (LNG) to interface between the legacy network and the ESInet.

- 9-1-1 authorities have accurate and complete GIS systems, which are used to provision the LVF and ECRF. A change to the 9-1-1Authority's GIS system automatically propagates to the ECRF and LVF and immediately affects routing.

- Federal, State and local laws, regulations and rules may need to be modified to support NG9-1-1 system deployment.

- Civic location will be validated by the access network against the LVF prior to an emergency call being placed. This is analogous to MSAG validation.

- While NG9-1-1 is based on protocols that are international, and are designed to allow visitors and equipment not of North American origin to work with NG9-1-1, the specific protocol mechanisms, especially interworking of legacy telecom and ESInet protocols is North American-specific and may not be applicable in other areas.