NPSTC is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.

The Need for a Nationwide Broadband Architecture for Public Safety

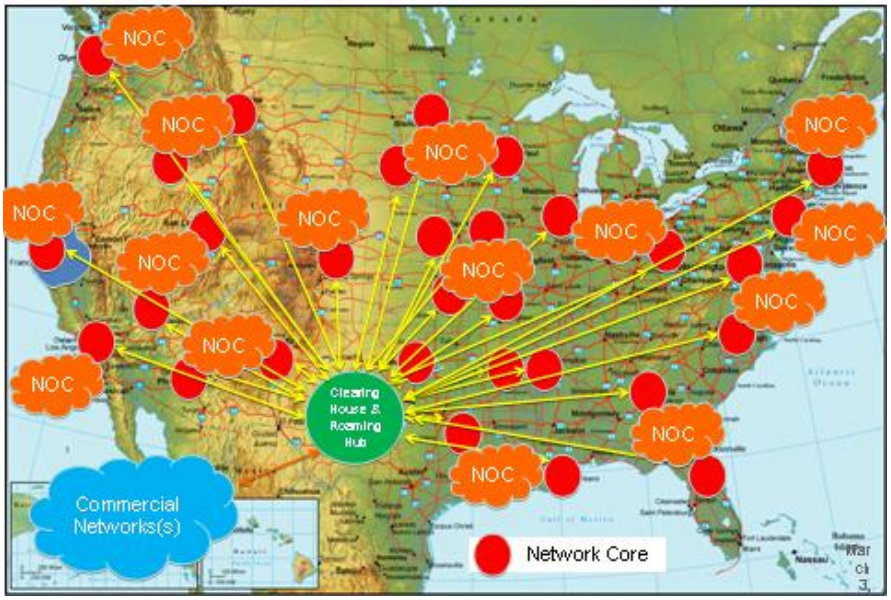
On March 1, 2011, the National Public Safety Telecommunications Council (NPSTC's) Governing Board unanimously voted to support the concept of a nationwide broadband architecture for public safety instead of the network of networks approach. At an ex parte discussion held by the FCC for invited representatives of public safety, NPSTC made the strong case for a flexible, reliable, and vibrant nationwide broadband architecture, presenting high-level conceptual drawings to help illustrate the difference between the network of networks approach and the financial, technical, and practical advantages of a nationwide network architecture.

Network of Networks Concept: The structure envisioned by some is a network of networks. The result could be multiple PLMN (Public land mobile networks) IDs, one for each public safety network. It could result in roaming between public safety networks, meaning that all associated engineering and business expense for roaming are replicated between each network. There could be inconsistent user subscriber fees for each network and roaming fees between the public safety networks. Not only is duplication and overbuild unnecessarily expensive, but upgrades could be inconsistent across public safety networks.

Public safety roaming would also be required onto commercial networks, requiring one agreement between each public safety network and each supported commercial network, or an agreement between each public safety network and a clearinghouse.

One Nationwide Network: With one nationwide architecture, there would be no public safety roaming on a nationwide public safety network that deploys a single Network ID (PLMN). There could be a consistent user subscription fee regardless of user location based on nationwide agreement (TBD). Upgrades would be nationally consistent. Public safety roaming would only be required onto commercial network(s). Single nationwide agreements with individual commercial operators connected through a clearinghouse can be used versus multiple agreements required in a network of networks approach.

Network-of-Networks With Clearing House Concept

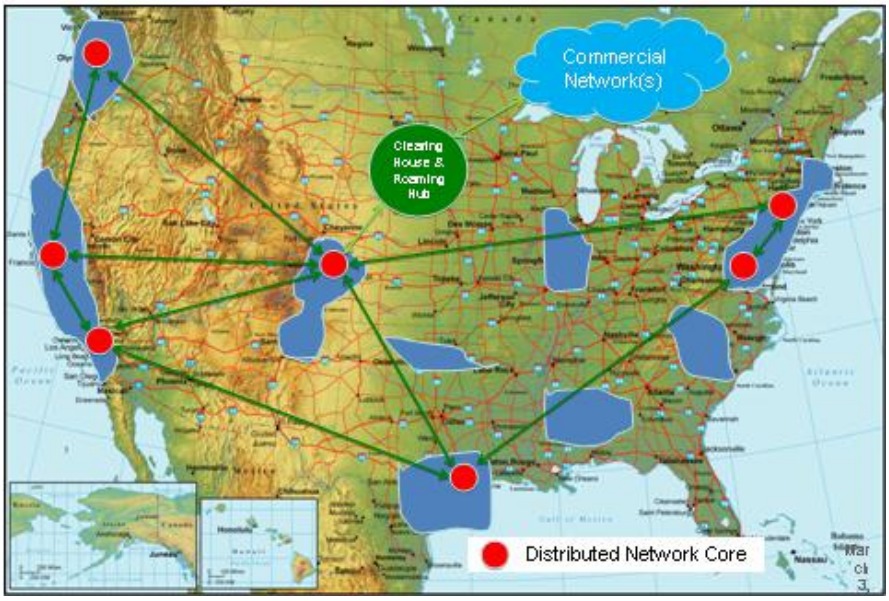


- Network of network concept could require multiple IDs (PLMNs), one for each public safety network.
- It could force roaming between public safety networks, and all associated engineering and business expenses for roaming replicated between each network
- It could result in inconsistent user subscription fees for each network and roaming fees between public safety networks (TBD) Duplication and overbuild result in unnecessary expenses
- Upgrades may be inconsistent across public safety networks

- Public safety roaming will also be required onto commercial network
- One agreement between each public safety network, and each supported commercial network, or an agreement between each public safety network and a clearinghouse and roaming hub.

- No public safety roaming on a nationwide network that deploys a single Network ID (PLMN)
- Consistent user subscription fee regardless of user location based on nationwide agreement (TBD)
- Upgrades nationally consistent
- Public safety roaming only required onto commercial network(s)
- A single agreement with a clearinghouse can be used versus multiple agreements in a network of networks approach

One Nationwide Network



The recurring costs to manage and refresh a network, over the long term, will be the largest cost component regardless of configuration. One nationwide network would be a much simpler configuration and will cost the least amount to manage, maintain, and upgrade. In a network of networks approach, release upgrades would need to be coordinated and consistent funding among all the network operators to keep every LTE component at the same release level. This would slow the overall evolution of the nationwide network to match the slowest of the multiple network operators or, if uncoordinated upgrades are made, the features available will not be uniform across the nation and could cause operability and interoperability problems.