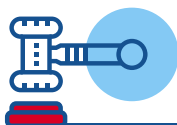


# A TALE OF TWO APPROACHES: MANDATORY VS. VOLUNTARY IMPLEMENTATIONS OF NG911

While NG911 is generally defined as upgrading or transitioning to an Internet Protocol (IP)-based 911 system, there are a variety of different approaches to the implementation of NG911, including whether or not it is mandatory that PSAPs join a particular ESInet. There are a multitude of approaches to implementation, whether state-level ESInets, regional ESInets, or local ESInets. Mandating participation is not inherently necessary to implement NG911 at a state and local level. This document tackles some common challenges, opportunities, and considerations for either type of deployment.



# Mandatory Implementations of NG911

## CONSIDERATIONS

### Authority

In order to mandate the implementation of NG911, the deploying entity must have the authority to require PSAPs/ECCs to join the transition. Most frequently, this will be legislative authority. The greatest challenge in pursuing a mandatory implementation is obtaining the necessary authority and addressing issues of local control, funding, and education. Failing to resolve these issues could create opposition to mandatory participation, which could create opposition to NG911 as a whole.

### Staffing

In a mandatory setting, some staff must be dedicated -- on a full or part-time basis -- to oversee the NG911 system and NG911 system service providers while also serving as a point of contact for PSAPs. In any context, strong leadership greatly assists in the successful deployment of NG911.

### Relationships

When considering whether or not to mandate NG911, it is important to develop relationships with all stakeholders, but especially public safety agencies who will be impacted by the transition. Mandating entities should consider whether the more directive approach will harm working relations or create resentment amongst stakeholder groups. A consensus-based implementation may ultimately produce a more harmonious NG911 transition.

### Enforcement

With any mandate, enforcement must be addressed, or the mandate may simply be ignored. Obtaining the authority to enforce a required implementation, by withholding funding for example, may be difficult to obtain.

### Funded or Unfunded Mandate

A primary consideration for any entity requiring NG911 participation is whether or not that entity can provide the necessary funding for the transition. Unfunded mandates exacerbate the risks of relationship harm or noncompliance requiring enforcement. Identifying funding to implement unfunded requirements detracts from the time and effort spent providing 911 service and response to the public.

## BENEFITS

### Total Participation

The obvious benefit of a mandatory NG911 implementation is that all impacted PSAPs will be on an NG911 system. This results in:

- parity of services to citizens
- more interoperability and failover options to ensure uninterrupted services
- possible cost savings through efficiencies of scale



# Voluntary Implementations of NG911

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## CONSIDERATIONS

### Authority

While voluntary NG911 deployments do not require authority to mandate participation, other authority may be required, such as cooperative purchasing power if an ESInet is implemented on a regional level without state action. If a state is deploying an ESInet, but not mandating participation, budgetary authority may be the only consideration.

### Funding

Since funding is not necessarily inherent in voluntary deployments, financing the transition may be more complicated depending on local funding and individual PSAPs' participation. If a voluntary system is not funded at the state level, and local funding inhibits the ability of PSAPs to join the system, low participation may make the entire system economically unfeasible.

### Governance

As with funding, depending on the level and type of voluntary deployment, governance of the system may be much more complicated than in a mandatory setting. In a mandatory setting, governance is usually specified. In a voluntary setting, governance may have to be formulated on a volunteer basis. In this case, stakeholders may be less willing or unmotivated to participate in the governance structure. But, again, strong leadership is key to a successful deployment. One option is to have the state or deploying entity provide leadership by bringing stakeholders together to volunteer to participate in a governance committee for the ESInet.

This will give the users of the system buy-in and a voice in how the network is managed, allowing the sharing of the state or other deploying entity's perspective, and will keep a communication channel open for all system users and stakeholders.

### Lack of Participation

The most obvious challenge in a voluntary setting is that every PSAP within the jurisdiction may not choose to join in the transition effort. This could result in insufficient funding or support for the system, lack of parity of service for citizens across a particular region, lack of interoperability, and fewer failover options.

### Procurement Concerns

Again, depending on how funding is structured in a voluntary deployment, it may be more expensive and complex to contract for systems if the number of participants is not guaranteed. However, joint efforts to build an ESInet can be memorialized prior to procurement and address this concern. Additionally, there are options for state assistance even in regional voluntary procurements to keep costs low. A state may have a contract for purchasing ESInet and NG911 core services with particular vendors from which local or regional jurisdictions can purchase. This can keep pricing consistent with what it would cost the entire state for unit pricing.

When jurisdictions voluntarily come together to build an NG911 system, they often have differing procurement

requirements and may also have varying technological requirements. These differences will have to be identified prior to any regional procurement. There are many ways to overcome these obstacles depending on the region and the relationships between the entities. Intergovernmental agreements may be used to agree upon an RFP that encompasses all of the requirements of the different jurisdictions. A region may also require separate contracts with a vendor to ensure all of their needs and requirements are met. Communication and documentation are the keys to jurisdictions with unique needs voluntarily partnering for NG911 systems. While it presents a challenge, there are successful examples of such partnerships across the country.

Another concern with local jurisdictions voluntarily building a regional NG911 system is lack of resources to write a request for proposal (RFP).

States can assist with providing templates or examples of regional RFPs. Jurisdictions may also look to other regions across the country who have completed similar efforts.

## BENEFITS

### Voluntary Participation

The benefit of voluntary participation in NG911 is that everyone in the system wants to be there. It can be easier to begin an implementation on a voluntary basis and entities or PSAPs who have reservations about NG911 can be persuaded to participate by seeing the many benefits of NG911 in action. Voluntary participation avoids enforcement issues and tends to build and strengthen relationships among stakeholders while also realizing the benefits of reduced network costs and other efficiencies of scale.

## Combined Deployments and Interconnection

Some states or jurisdictions will have a mix of regions undergoing mandated and voluntary NG911 deployment. It is important to understand that interoperability is a final goal of NG911 and working with regions to interconnect is one of the guiding principles of implementation. When deployment types are combined, it could present a challenge for interconnection agreements, but not an insurmountable one. This is another reason why strong leadership and governance throughout all types of system deployments is crucial to the success of NG911. All aspects of NG911 involve transition and building upon previous efforts is true for determining whether or not to mandate NG911. One approach is to commence the initiative with voluntary participation and move to mandatory only when incomplete public safety. As stated above, deployments have been successful using both models or a step-by-step, combined approach.

## Conclusion

As with all 911 issues, the takeaway is that there is not a “one size fits all” strategy for NG911 deployment. It is vital to include all stakeholders in the process, regularly sharing open and honest dialogue about the challenges and benefits of transition to NG911. The implementation of an NG911 system can be successful in a variety of situations leveraging creative approaches. And a lack of authority to mandate the implementation of NG911 should not be a barrier to delivering the benefits of improved 911 service in any community.