

Statewide Interoperability Executive Committees Introduction, Formation, Purpose, and Goals

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Introduction

This document is intended to highlight cost effective methods to improve interoperability at the local, state and federal level. These recommendations have historically not been addressed because there has been no regulatory body with the authority to insure interoperable “best practices” at the local level. Currently each community defines interoperability as they see fit with their unique resources implemented in a unique manner. The sole intent of this document is to highlight the improvements in public safety communications interoperability that can be accomplished by having consistent management at the local level. This is best implemented in an environment containing a continued public safety dialogue, sponsored by a consistent interoperability resource/advocate at the state level, the Statewide Interoperability Executive Committee (SIEC)

The concept of a State Interoperability Executive Committee (SIEC) was introduced in the Federal Communications Commissions (FCC) National Coordination Committee Federal Advisory Committee under FCC Docket 96-86 Fourth Report and Order and Fifth Notice of Proposed Rule Making dated January 17, 2001, which was created to develop technical and operational parameters for 700 MHz public safety spectrum. The SIEC concept was introduced within the NCC so each state *could* form a SIEC to administer the dedicated interoperability spectrum the NCC had identified in the 700 MHz public safety allocations. The FCC envisioned that entities desiring to operate on 700 MHz interoperability channels would enter into a MOU agreeing to operational and technical parameters deployed on the channels with the SIEC, which would require them to adhere to an interoperability plan created specifically for use in that region. The NCC recommended that the SIEC’s develop interoperability operational plans for the 700 MHz interoperability spectrum. Finally, if a state chose not to form an SIEC, the SIEC responsibility of administering the 700 MHz interoperability channels would default to the 700 MHz Regional Planning Committees in the particular area. It is important to note the FCC did not mandate the SIEC model, but encouraged states to form SIEC’s.

This document outlines some simple, cost effective operational and technical parameters that should be required by the FCC in a rulemaking proceeding, consistent with pending National Coordination Committee recommendations under Docket 96-86. These recommendations, when implemented, will immediately provide an increase in public safety communications interoperable potential across the nation, when implemented.

Formation

The SIEC concept works best if implemented in two parts: The first is to acknowledge that states are best suited to *identify* public safety interoperability functionality in a state due to their wide area of responsibility. They can best determine capabilities and impediments to local interoperability and administer the SIEC body, which is accomplished by establishing an inclusive mechanism that can receive and process input from all users. As states have communications requirements throughout their wide area of responsibility with no jurisdictional exclusions, they are best able to identify, acknowledge, and remain cognitive of shortfalls and roadblocks to public safety interoperability in an area. Simply put, the wider area of responsibility, the more knowledge of the area in question (albeit it in a general, less specific sense compared to local users), the jurisdiction will have.

A certain city would not be able to provide expertise to a problem in a rural area 200 miles away within the same state, but the state jurisdiction will have the responsibility of acknowledging unique problems in both areas. So, due to the wide area of responsibility states have, they are best prepared to *identify public safety interoperable quotients throughout a state*.

A second required element of SIEC formation is that it should be inclusive to all users regardless of size, operating band, or discipline. The SIEC structure must be open and consist of participants from all public safety entities throughout the state. It is important to note that the interoperability obstacles identified by the state should be distributed to all users within the state (the inclusive SIEC) body to verify the states interpretation of the scenario. This is where the inclusive environment is beneficial since the local agency has additional detailed information to refute the states interpretation of the portrayed interoperability scenario. The dialogue resulting from these discussions is what improves interoperability. When users representing agencies sit down and discuss the issues, things improve. Those involved representing the local communities should include, but not be limited to, first responders, associations that support first responders, public safety management personnel, non-traditional public safety communications users (outside of Police, Fire and EMS) such as emergency management personnel, health departments etc. The SIEC environment created should be available to all eligible entities, with provisions to include interested members of the public service and critical infrastructure community.

Note Several SIEC's have been formed across the country through state legislation and, per the legislative language, do not operate in an open format enabling input from public safety entities within their jurisdiction. These unique SIEC conditions partly result from a lack of structure and the *optional* SIEC development provided by the FCC. In other states, the designation of a SIEC body was denied as the state had a body already in place to handle communications interoperability issues. Indeed, this was the reason the FCC

cited when asked why they did not mandate an SIEC, as they were hesitant to require something that might be duplicative in nature.

Recommendations: FCC should mandate SIEC's but require certain conditions (inclusive operation, all band interoperability and the creation of a SIEC interoperability plan). Congress should support the FCC's mandate, as it, along with the duties associated with each SIEC, will promote national interoperability.

Purpose

The SIEC concept was introduced on a voluntary basis to administer 700 MHz FCC designated interoperability channels. It was not intended to implement, manage, or document FCC designated channel usage in bands outside of 700 MHz. In the scope of the NCC, it was quickly identified that SIEC's would be appropriate to facilitate *all* interoperability spectrum in states as many of the conclusions reached for 700 MHz spectrum would be applicable for other bands, as well. Public safety communications interoperability is not band specific and **interoperability expansion is an increased dialogue between public safety agencies, is not band specific**. A few of the NCC recommendations that have been conveyed to the FCC under Docket 96-86 identified as beneficial to interoperability are listed below:

Statewide Interoperability Executive Committees It was thought that as some state governments are creating non-inclusive SIEC's that the name of the SIEC should be Statewide rather than State, highlighting the fact that a states role in the SIEC is administrative in nature, and not controlling. It was decided within the NCC that these conditions provided the most interoperability in SIEC development: renaming SIEC's to Statewide Interoperability Executive Committees, an FCC mandate of SIEC's in each state, membership definition, meeting requirements, and expanding the SIEC's authority to the FCC designated interoperability channels in all bands.

State Interoperability Plans The establishment of FCC-required, all band interoperability plans authored by the SIEC's along with the requirement they be retained online on a database (such as Denver University's CAPRAD) and updated every two years in PDF form for viewing by agencies within a state as well as adjacent state public safety users and federal responders. This item will establish the beginning **dialogue** required for improved interoperability at the intra-state and inter-state level. There currently is no requirement for any established body to communicate a state's interoperability plans, in any band, across state lines. This "stovepipe" intra-state legacy approach is responsible for most of the poor level of public safety interoperability and subsequent functionality between states, whether immediately adjacent or not. Conversely, many states National Guard units have inter-state agreements with neighboring states, but public safety agencies lack similar agreements to establish inter-state communications plans. The creation of plans would allow for the inter-state communications between public safety agencies to increase. In addition, SIEC's are an excellent mechanism to serve as a "Point of Contact" for federal agencies to interact with when federal, state and local interoperability solutions need to be identified. The SIEC

should have the intimate information regarding all areas of the state needed to promote interoperability.

Standardized channel nomenclature-The benefits derived from all public safety agencies across the country to name the ninety-eight (98) specific FCC channels designated for interoperability with common standardized channel names is substantial. These channels are used today and quite often interoperability is lessened due to the fact that different agencies have different identifiers for common channels. Congress should support the FCC's requirement for standardized channel names, as, without mandate, they will not continuously provide interoperability potential nationwide.

Standardized technical parameters- The benefits derived from all ninety-eight (98) FCC designated interoperability channels when programmed with consistent technical parameters (CTCSS, Network Access Codes etc) are also substantial. By letting over 50,000 agencies determine how they will each implement the same channels, we lose an opportunity to achieve continuity and interoperability potential across the first responder community. The FCC has previously identified the necessity and placed in the rules common technical parameters with regard to a common nationwide CTCSS tone (156.7 Hz) on the calling channel of the 821-824 MHz interoperability channels contained in Docket 87-112, so past history indicates this is a beneficial requirement.

Standardized Incident Command Structure To better facilitate the resource of interoperability channels and their implementation, the NCC recommended to the FCC that Incident Command/Incident Management be utilized, based on regional/local definition, and that certain consistencies with Federal Incident Management practices be acknowledged.

Recommendation: Congress should support the FCC in their mandate of SIEC's, as the FCC, as public safety's advocate, needs to make the decision that enables interoperability despite local hesitations or concerns of un-funded mandates. Recommend seed funding to help facilitate SIEC development be considered in all states to promote interoperability planning and achievement.

Recommendation: States use seed money to create the first round of interoperability plans that might just be the documentation of what is already used in each state. This portrayal of the interoperability landscape within a state would then be available and the results could be analyzed and a common thread of nationwide interoperability, could be considered. This should be an SIEC's first duty.

Recommendation: The FCC, with congressional support, should mandate standardized channel nomenclature for public safety interoperability channels. This is an example of an operational consideration, with little or no expense, that will result in improved interoperability across the country. FCC needs congressional support to make these requirements as they promote interoperability requirements which enable an increase of interoperable potential in a region.

Recommendation: NCC recommendations of technical standards should be required by the FCC in their rules, as they have done in the past. They should receive support in this initiative from Congress as the return in interoperability potential (quotient) far outweighs the minimal costs.

Recommendation: Incident Command structure should be encouraged in conjunction with Law Enforcement, Fire and EMS First Responders. Common applications should be explored and in areas where each disciplines unique requirement will require a particular methodology, those unique requirements should be acknowledged by the other disciplines. First Responders of differing disciplines have unique needs, but operational incident command structure should be encouraged at all levels of government to identify commonalities.

Recommendation. At a time when significant grant monies are being distributed to the local community there is an opportunity for the Federal Government to require the standardization of certain communications parameters at the local level in the implementation of interoperability resources as a condition to the grant award. This will immediately provide a greater common communications thread throughout the nation. The State of Missouri has used the State Interoperability Executive Committee as a resource to review grant funding and make recommendations regarding applications. For example, the Missouri SIEC recommends that grant monies not be directed to VHF portable radios with a channel capacity of less than 48 channels. Many vendors make acceptable models and the desire is not to utilize a specific vendor, but rather a specific capacity. This is due to the number of VHF interoperability channels available today and anticipation of federal interoperability channels in the band in the future. The Missouri SIEC petitioned the vendor community with a list of questions regarding the capabilities of their equipment and asked them to respond indicating which of their products were compliant with SIEC requirements. The list of responses was posted on a website and was utilized during the grant review process to ensure devices purchased with grant monies had the highest interoperability quotient.

Goals

The goals of Statewide Interoperability Executive Committees are to promote interoperable potential within the public safety community. From the Incident Commander perspective, his ability to use the spectrum resource he has available at an incident scene is proportional to how prepared those arriving are. If arriving units, which will include police, fire and EMS, have a certain level of compatibility and commonality with regard to the frequencies programmed in their radios, the ability for the Incident Commander to deploy those units in an effective manner improves. His *expectation* that the arriving units have a common resource will change the way he approaches the protection of life and property at the incident scene.

If each state SIEC developed a short document that outlined interoperability and how it is achieved in their state, all 50 states interoperability quotient would be documented. Only

then could we begin to define and attempt to raise the nations level of public safety communications interoperability, while driving towards a common interoperable thread to promote the first responder community's ability to talk to each other in real time.

Conclusion

SIEC expansion offers local management of interoperable resources and the establishment of a much-needed "dialogue of interoperability" at the local level. The FCC, with congressional funding support should require states to create SIEC's. Those states that already have existing bodies that address interoperability issues in an inclusive statewide manner should be urged to change the name of the body to Statewide Interoperability Executive Committee to be eligible for support funding.