

***SIECs:
STATES' MOST EFFECTIVE TOOL FOR
COORDINATING INTEROPERABILITY***

***Washington State Case Study and Best
Practices Guide***

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EXECUTIVE SUMMARY

Public safety agencies at all levels of government require communications interoperability in both routine and emergency operating environments. In its efforts to promote interoperability, the Public Safety Wireless Network (PSWN) Program has become involved in helping to develop state interoperability executive committees (SIEC). The SIEC is intended to serve as a centralized forum to address wireless interoperability issues and encourage development and modification of systems within a state. The central objectives of SIECs are to promote systems development that maximizes economies of scale and to initiate consolidated procurement and maintenance activities.

The SIEC concept was originally developed by the PSWN Program as a component of its participation in the Public Safety National Coordination Committee (NCC). During deliberations in early 2000, the NCC decided to include the PSWN Program's SIEC concept in its first set of recommendations to the Federal Communications Commission (FCC). The FCC sought additional comment and subsequently issued a rulemaking formally endorsing the formation of SIECs. The FCC also made formation of an SIEC or its equivalent a prerequisite for states wanting to obtain licenses for the 2.4 megahertz (MHz) of spectrum designated for state licensing on the 700 MHz band.

The State of Washington had a substantial head start in developing an SIEC, which made it a logical choice for the PSWN Program's efforts. This diverse state's need for public safety communications interoperability was recognized at the highest levels of government, going back several years. Since early 1999, the state, under the auspices of the state's Information Services Board (ISB) and the Justice Information Committee; an Interoperability subcommittee was created. The Interoperability Subcommittee has been working to establish a centralized entity to address interoperability coordination and planning issues. A strong tradition of intergovernmental cooperation supported these efforts from the outset. Shortly after the initial contact with the PSWN Program, a major earthquake within the state only heightened the need to foster interoperability among the state's dedicated public safety radio systems.

Working directly with state and local officials, the PSWN Program examined the history of SIEC development in Washington. The program determined that development should proceed as a natural outgrowth of existing relationships and processes, using informal memoranda rather than sweeping policy initiatives as the vehicle. The PSWN Program and the state representatives discussed the legal and administrative foundations necessary for the SIEC, both within the state and in relation to federal regulators. They also discussed the maximization and evolution of existing relationships and the development of new ones in the context of the SIEC. They defined the roles of the governor and other key participants, as well as the incremental steps necessary to achieve lasting, economical, and effective change. Lastly, they reviewed the critical issue of funding, relating both to limiting expenditures and to seeking new sources of input.

This Best Practices Guide details these efforts by Washington State and the PSWN Program, both collectively and individually. The objective was not to create a step-by-step instruction manual. Rather, the PSWN Program offers the Best Practices Guide as a case study of one of the pioneering efforts to form an SIEC. The PSWN Program and the State of Washington hope it serves as an example and a catalyst for future efforts across the Nation.

1. INTRODUCTION

1.1 Public Safety Communications Operating Environment

Virtually all state, local, tribal, and federal public safety agencies use wireless systems as their primary means for exchanging information in both emergency situations and daily operations. *Interoperability* defines the ability of public safety personnel to communicate by radio on demand with staff from other agencies, and in real time. Public safety agencies require three distinct types of interoperability—day-to-day, mutual aid, and task force.

Day-to-day interoperability involves coordination during routine public safety operations. Interoperability is required, for example, when any police agency joins in a vehicle pursuit of a suspect after the chase has moved outside their jurisdiction. Once other agencies become involved, its personnel should be able to communicate directly with their local counterparts in real time.

Mutual aid and disaster response / coordination interoperability involves a requested joint and immediate response to major incidents that exceed the resources of the requesting agency. It requires tactical communications among numerous groups of public safety personnel. Airplane crashes civil disturbances, terrorist attacks and bombings, forest fires, earthquakes, and hurricanes are all examples of mutual aid events.

Task force interoperability involves state, local, tribal and federal agencies coming together for an extended period to address a specific and prolonged public safety concern. Participating agencies may organize task forces for extended recovery operations from major disasters, for providing security at major events, or for conducting operations in response to prolonged criminal activity.

1.2 The Public Safety Wireless Network Program Approach to Interoperability

The Public Safety Wireless Network (PSWN) Program is a federally funded initiative operating on behalf of all state, local, tribal and federal public safety agencies. The Department of Justice and the Department of the Treasury are jointly leading the PSWN Program's efforts to plan and foster interoperability among public safety wireless entities nationwide. The program is a 10-year initiative to ensure that no man, woman, or child loses his or her life because public safety officials cannot talk to one another.

A critical element in achieving this goal is ensuring that decision makers at all levels of government undertake communications planning for any particular area with the full support and participation of all public safety entities involved. A number of state, local, tribal and federal agencies are actively engaged with the PSWN Program in a variety of activities designed to promote coordination and resource sharing. In addition to the Public Safety National Coordination Committee (NCC), the program has supported, and been supported by, a number of other entities dealing with public safety communications. These include the Association of Public-Safety Communications Officials-International, Inc. (APCO), the Federal Law Enforcement Wireless Users Group (FLEWUG), the National Public Safety Telecommunications

Council (NPSTC), the Interdepartment Radio Advisory Committee (IRAC), the International Association of Chiefs of Police (IACP), and the International Association of Fire Chiefs (IAFC). Additionally, the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA) are working with the PSWN Program on rulemaking and standards issues for both federal and nonfederal spectrum, including the establishment of co-equal access agreements.

The PSWN Program has identified five key issue areas that may involve potential obstacles to interoperability. The relative severity of these obstacles obviously depends on the ability of public safety and government entities to respond and adapt to them.

- ***Coordination and Partnerships***—During the interoperability planning phase, public safety agencies need to plan for interoperability by sharing resources and working with other jurisdictions to address their communication requirements.
- ***Funding***—Obtaining funding can be a difficult and time-consuming process because often there is no dedicated funding source for replacing or upgrading radio systems. Public safety agencies should undertake efforts to obtain funding as early in the process as possible.
- ***Spectrum***—Not enough radio spectrum is available for use today, and future technologies will demand even more spectrum. No one can create additional spectrum; one of two federal regulatory agencies must allocate or reallocate it.
- ***Standards and Technology***—Historically, radio communications equipment produced by multiple vendors has used proprietary and incompatible technology. This incompatibility prevents interoperability even when radios operate in the same band. The public safety community and industry must work together to foster the development of standards and compatible equipment.
- ***Security***—System designers must increasingly address security concerns like hacking and illegal monitoring when designing a system replacement or upgrade.

1.3 Enhancing Interoperability

Well-planned, coordinated efforts to foster interoperability through new spectrum allocation and revision of existing resources are crucial. One approach identified as a valuable option for states to use in laying the foundation to improve interoperability is the formation of state interoperability executive committees (SIEC). The formation and organization of, and even terminology related to these committees may vary significantly. However, the single most critical element is the idea of bringing together decision-makers from several governmental sectors, with ultimate authority derived from the executive power of the state. Committee membership would necessarily include representatives from the state, local, tribal, and federal public safety arenas, in addition to other stakeholders such as legislative representatives, information services, and procurement officials.

The SIEC should work to bring wireless interoperability issues to the forefront and encourage development of future systems and modification of existing systems. Key planning components for SIECs are developing systems to maximize economies of scale and initiating consolidated procurement and maintenance activities.

Several states have begun laying the groundwork for cooperation and statewide wireless planning in the form of memoranda of understanding (MOU)¹ or similar agreements. The State of Washington, in particular, has made noteworthy progress in forming an SIEC under the specific guidelines provided by the FCC. Washington has accomplished this by leveraging existing relationships and fostering proactive planning efforts. This Best Practices Guide serves as both a description of the SIEC concept and as a case study discussion of Washington State's efforts to date. The PSWN Program does not intend that other states use the case study to duplicate Washington's efforts in "cookbook" fashion. Rather, this study offers a discussion of how *one* state began the process of developing an SIEC, developed new relationships and strengthened existing ones, and documented lessons learned. The end result of Washington's efforts will be an operational entity to coordinate interoperability throughout the state—this is the only pre-determined result that any state should anticipate.

¹ The term MOU is used interchangeably in the context of this discussion with Memorandum of Agreement (MOA) or similar agreements based on compact and/or contract principles involving specific cooperation or coordination between governmental entities.

2. SIEC BACKGROUND

2.1 SIEC History and Development

The PSWN Program initially developed the concept of an SIEC through its participation in the NCC. In January 1998, the FCC, in response to direction from the Congress under the Balanced Budget Act of 1997, reallocated an additional 24 megahertz (MHz) of spectrum for public safety use. This spectrum will be taken from the television broadcast band (Channels 63, 64, 68, and 69). The FCC designated a portion of that spectrum, 2.6 MHz, to support nationwide interoperability among state, local, tribal, and federal agencies. The FCC then chartered the NCC under the Federal Advisory Committee Act (FACA) to develop and provide recommendations to the FCC concerning rules and standards for operation on this 2.6 MHz of spectrum.

The PSWN Program advanced the concept of an SIEC during the NCC's deliberations to formulate its first set of recommendations to the FCC. During the NCC meetings in San Francisco, California, on January 27–28, 2000, the PSWN Program introduced the idea of forming SIECs to administer the interoperability spectrum. The PSWN Program subsequently developed a white paper,² which the NCC membership approved and incorporated into the recommendations.³

The FCC incorporated these recommendations into its Fourth Notice of Proposed Rulemaking (NPRM) on WT Docket 96–86.⁴ In the NPRM, the FCC concurred with the NCC's determination that the states should administer the Interoperability channels. The FCC tentatively concluded that each state should form an SIEC to fulfill this role.

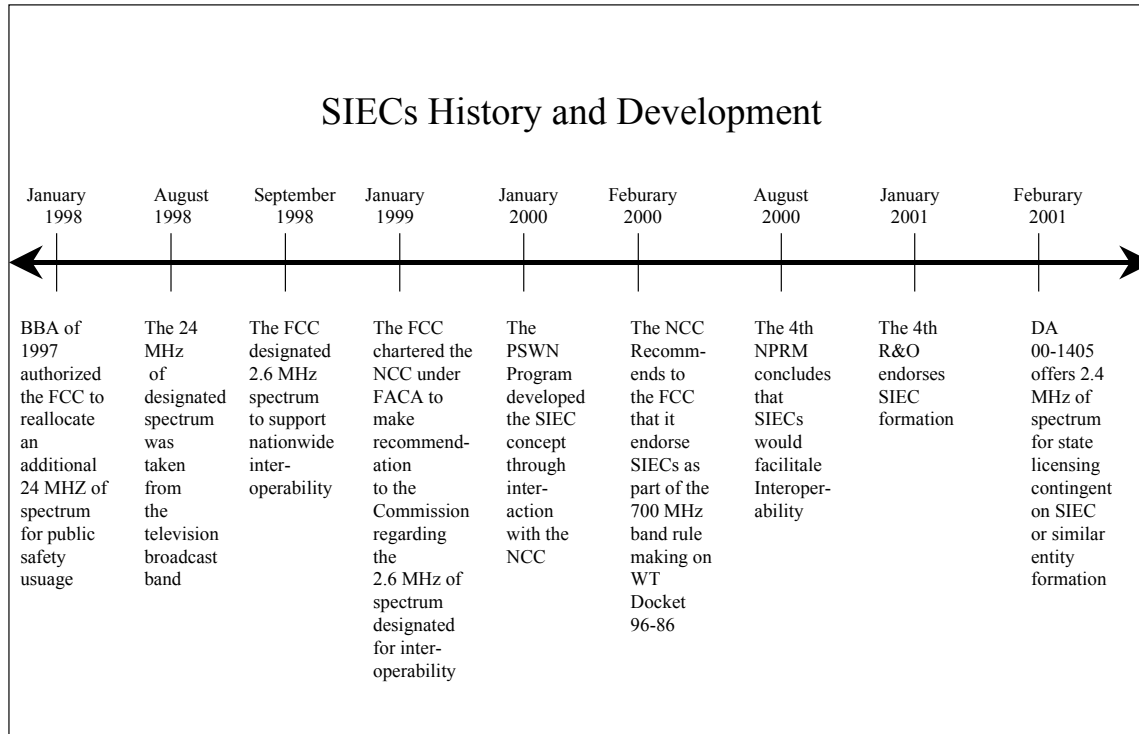
The FCC noted that under the NCC's approach, entities desiring a license to operate on the Interoperability channels would be required to enter into an MOU with the pertinent SIEC. The SIEC would have primary authority to enforce the MOU's terms, with final authority vested with the FCC. The FCC further observed that the NCC recommended that SIECs have additional duties. These included developing interoperability operational plans, with this duty passing to the Regional Planning Committee (RPC) if an SIEC or other state-level agency did not fulfill this role. The FCC concluded that because the benefits of SIECs were best determined by the states, the decision to form such groups or seek assistance from existing groups, such as RPCs, should be determined by the states. The FCC was concerned about potential situations in which neither the SIEC or any other state agency would oversee development of the state interoperability plan. To help resolve this concern, the FCC sought comment on whether RPCs should oversee the development of an interoperability plan in these cases.

² Public Safety National Coordination Committee, *Recommendations to the Federal Communications Commission for Technical and Operational Standards for Use on the 764–776 MHz and 794–806 MHz Public Safety Band Pending Development of Final Rules*; Kathleen Wallman, Chair; February 25, 2000; Appendix L. (See Attachment A.)

³ NCC Recommendations, February 25, 2000. (See Attachment B.)

⁴ Fourth NPRM, *In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010*, WT Docket 96–86, rel. August 2, 2000. August 2, 2000. (See Attachment C.)

After public comment on the NPRM, the FCC issued its Fourth Report and Order (R&O).⁵ In this document, the FCC recounted the NCC’s recommendation that each state should form an SIEC to administer the Interoperability channels. The FCC included the MOU requirement, and acknowledged the possibility of assigning RPCs to administer operational plans in the absence of SIEC or other state action.



Based on the public record, which included strong support for the creation of SIECs by numerous public safety entities, the FCC endorsed the creation of SIECs. In so doing, it observed that the states best knew their own capabilities and could far more effectively manage their own communications resources than any outside entity. The FCC elected not to mandate creation of SIECs only because some states already had a mechanism in place that was administering the Interoperability channels. It was concerned that mandating SIECs in these situations might result in inefficiency or duplication effort. However, the FCC strongly encouraged the formation of an SIEC or another equally effective state-level agency to administer the Interoperability channels in the states where no such an entity already existed. Additionally, the FCC adopted the NCC’s recommendation that if an SIEC or other state agency elected not to oversee the administration of its Interoperability channels, the RPCs would assume this responsibility. The FCC concluded that the best approach would be a voluntary framework that would allow each state to determine its own requirements.

⁵ Fourth R&O, *In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010*, WT Docket 96–86, rel. January 17, 2001. (See Attachment D.)

The FCC also cautioned the states that they had a limited time to give notice that they would establish the SIEC or equivalent state agency. The FCC noted that if a state had not created a plan for establishing its SIEC, or its equivalent, by December 31, 2001, and effective January 1, 2002, then the RPCs would administer the Interoperability channels.

Shortly thereafter, the FCC issued a Public Notice⁶ highlighting its determination to give states the option to administer 2.4 MHz of the 700 MHz band spectrum. This spectrum was distinct from the 2.6 MHz designated for interoperability that had been the focus of the NCC's activities and recommendations. The FCC authorized the governor of each state, or his or her designee, to apply for the state license. This important action allowed states to coordinate planning efforts for this reserved spectrum, available for all public safety agencies, within the same band. The FCC again noted that the deadline to apply for this spectrum was December 31, 2001. The FCC said the remaining spectrum, including the 2.6 MHz of spectrum designated for interoperability and 19 MHz for general use, would be licensed closer to the time when the spectrum actually became available. Availability will be contingent upon adoption of standards and clearance of incumbent television broadcasters on Channels 60–69, which will likely take at least 5 years.

2.2 Basic Principles of SIECs

The requirements for SIECs are almost entirely function oriented, which allows great flexibility regarding their form. State governments must provide their SIECs with the appropriate level of authority. They should involve the necessary degree of cooperation and leverage the required contacts and expertise. Beyond that, the specific administrative and organizational structure, as intended by the FCC, is left to the states.

Interoperability, by definition, requires coordination and partnerships among all levels of public safety. These efforts can often be complex and time consuming for agencies already hard pressed for resources. By providing a central forum, the SIEC is the best option to permit public safety agencies to overcome obstacles to achieving interoperability. This forum provides a focal point to address all issues, to coordinate among all affected parties, and to share experiences. As the FCC conclusions implied, coordination at the state level is especially critical to achieving nationwide interoperability. This is because states are in a unique position to leverage and formalize existing ad hoc interoperability arrangements as well as develop them where they are lacking. Because state initiatives are often effective in providing the structure, funding, and motivation for participation at the local level, coordination led at the state level is the only appropriate choice. In short, the implementation of SIECs is the single best formula to make nationwide interoperability a reality.

2.3 Organizational Discussion

As stated by the FCC, the primary purpose of the SIEC is developing and enforcing the interoperability plan set forth in the MOUs or other agreements established within the state. These agreements may include other roles dictated by that state's particular needs. Beyond that,

⁶ FCC Public Notice, *Public Safety 700 MHz Band—State License Option to Apply Runs Through December 31, 2001*; DA 01–406, rel. February 15, 2001. (See Attachment E.)

the FCC specifically declined to mandate a particular structure or provide a detailed list of requirements for SIECs, concluding that such matters were best determined at the state level. As this limited mandate implies, the structure and operation of the SIEC and its responsibilities are quite open and flexible. The objective of the state should be to assess its own situation and tailor its SIEC, and the MOUs or other supporting agreements, to leverage both practical and, ultimately, monetary efficiencies, rather than add another layer of bureaucracy.

It is critical that an SIEC, regardless of its organizational structure, facilitate different agencies at all levels of government working together to coordinate planning and resources. Just as the degree of expenditure and coordination by and between public safety and other government entities (e.g., general services and transportation) is fully scalable, so too is the scope of implementing an SIEC. Because most of the individuals would participate in an SIEC as a component of their existing duties within public safety communications, an SIEC should not involve significant new dedication of personnel or resources.

Because an SIEC is oriented toward coordinating resources, not designing or implementing any particular communications infrastructure, implementing an SIEC should not, in and of itself, necessitate any additional equipment expenditure. What an SIEC *should* ultimately do is allow for increasingly effective acquisition and deployment of materials through means such as procurement of compatible systems and execution of multigovernmental acquisition contracts with vendors. These measures should, by definition, reduce overall costs.

Ideally, the amount of investment in an SIEC will ultimately yield comparable benefits. The operational SIEC will allow for economies of scale and other efficiencies that should eventually reduce overall cost and staffing requirements by operating a single entity rather than multiple entities performing the same function for different organizations throughout the state.

2.4 Potential Problems of not Pursuing SIEC-Type Structure

The public safety community is keenly aware that the recent experiences of September 11, 2001; Oklahoma City; Columbine High School; the Nisqually Earthquake and countless other mass-response events, have significant if not frightening implications. Increased threats and changing mission requirements place new responsibilities on public safety agencies. These responsibilities have changed the very nature of their operations and made interoperable communications an absolute necessity for all public safety agencies at all levels of government.

The clear implication of the FCC's message, in addition to the possible inefficiencies or service gaps resulting from not forming an SIEC, is that eventually it may be necessary for some other entity to step in. The FCC, RPCs, or some other regional or federal entity beyond the state level would undertake the development of an interoperability scheme. This would effectively limit the role and authority of the state to coordinate interoperability on a more or less permanent basis. None of the organizations involved in and supporting public safety communications, the FCC, the NCC, or the PSWN Program views this as the optimal result.

In effect, an SIEC is a state's best opportunity to get in on the ground floor, so to speak. This will guarantee the states the central role in coordinating spectrum resources at all levels of government within its own borders and ensure consistency and control in the future. The FCC

has established a clear deadline, the end of 2001, for the states to license their spectrum and has made an SIEC an essential prerequisite for participation in this limited opportunity. Moreover, the sooner the state begins the process of developing interoperability plans, the more flexibility it and its affected public safety entities have to develop a consistent plan. This planning effort can potentially eliminate redundancies and inefficiencies sooner, *before* resources are committed.

2.5 Legal and Administrative Issues

The FCC has, by and large, directly addressed the federal law issues pertaining to the formation of SIECs at the outset. This is necessary because the FCC holds the ultimate and exclusive authority for the licensing of and operation on U.S. radio spectrum by state, local, tribal, and private entities, but not federal entities. However, the Federal Government maintains a significant presence in many states (e.g., in the areas of tribal lands, natural resource management, and flood and wildfire suppression). Because interoperable communications must cut across all levels of government, it is essential that federal entities and federal spectrum be involved in the SIEC planning process from the beginning.

For this reason, early coordination with the NTIA, which controls the use and licensing of federal frequencies with the same authority that the FCC has for all other spectrum, is paramount. The NTIA Manual⁷ provides basic guidelines for federal spectrum licensing equivalent to the FCC Rules. Such coordination may include, but is by no means limited to, access of state, tribal, or local agencies to federal frequencies on either an ongoing or contingency basis.

The FCC has stated that licensees authorized to operate radio systems on the Public Safety Pool frequencies designated in §90.20 may share their facilities with Federal Government entities on a nonprofit, cost-shared basis.⁸ The FCC has further recognized the concept of co-equal access as defined by the FLEWUG and further endorsed by the NCC. The FCC has noted that rules have existed for many years allowing federal use of FCC frequencies for interoperability.⁹ Whether in the case of federal access to state licensed spectrum or state access to federally licensed spectrum, the SIEC would, again, be in the best position to address issues statewide with the appropriate entities. These may include regulatory agencies, RPCs, frequency coordinators, the public safety entities involved throughout the state, or, for that matter, with SIECs or equivalent entities in adjacent states or regions.

The issue of spectrum licensing and operation falls exclusively under the authority of the President (through the NTIA) and the Congress (through the FCC) by the Communications Act of 1934, as amended. State law largely governs the remaining legal issues relating to the formation of an SIEC. Notably, even federal entities are generally subject to state law for activities entirely within that state's borders unless the Congress chooses to preempt that right specifically and for a clearly defined purpose. Therefore, a necessary preliminary step of SIEC

⁷ See, generally, *Manual of Regulations and Procedures for Federal Radio Frequency Management*, January 2000 rev. May/September 2000.

⁸ Third R&O, *In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010*, WT Docket 96–86, rel. October 10, 2000, at Paras. 65–66.

⁹ Fourth R&O, *supra*, at Paras. 25–27.

development is reviewing the relevant state statutes and precedents regarding coordination and partnerships of this nature.

Planners should review several elements of their state law as an early step in this process. These would include, at a minimum, the authority and limitations on the legislature for statutory actions, and the governor for executive orders. There may be other aspects to consider based on the constitution, administrative structure, political climate, or other variables specific to the state or region. If it appears undesirable or politically unwise to pursue these types of actions in the formation of the SIEC, the best course of action may be to rely entirely on MOUs.

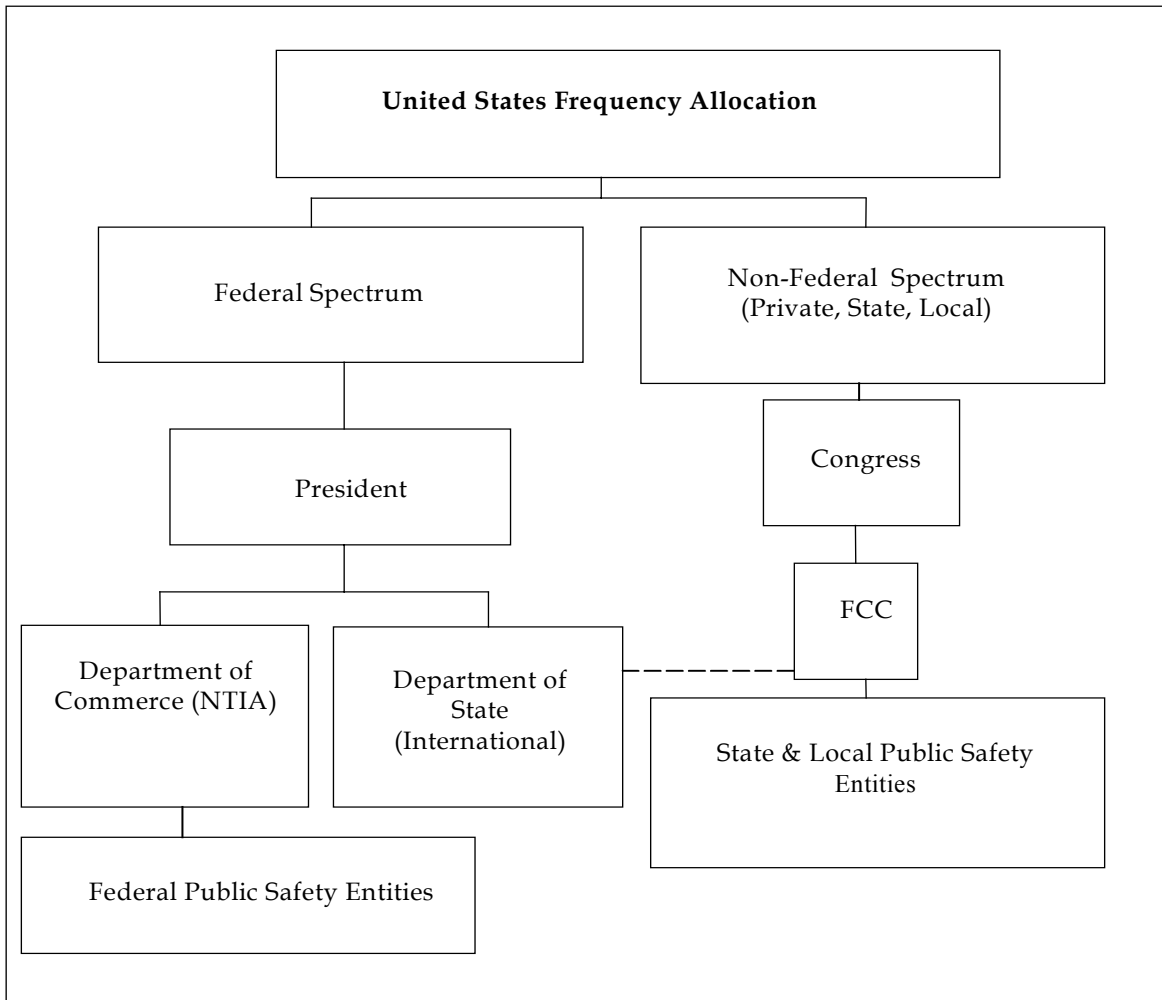
Along with the state-level authority, it is also prudent for those developing an SIEC to examine the inherent authority of state political subdivisions (i.e., counties, townships, and parishes) to bind themselves individually to MOUs. The alternative may be going through the state or some other larger entity. Touching again on the FCC's concern about redundancy, SIEC planners should review in detail any preexisting inter- and intra-state entities and agreements (i.e., RPCs, regional coordination plans, and FCC waivers). It is important to ensure their roles or components would not overlap or conflict with the new SIEC.

Key elements in any SIEC structure should be simplicity and nonduplication of existing efforts. In all instances, the SIEC should fully leverage the state's existing administrative structure. Ideally, there should be no need for state constitutional amendments, broad voter ratification, or significant governmental action. Commitments are essential, particularly in the case of ensuring co-equal access to spectrum, which may entail significant infrastructure investment by the affected entities to enable use of spectrum not licensed to them.

More directly, SIECs should draw on processes and relationships that already exist, not form new ones. These would invariably seem unnatural to staff who, in many instances, have performed their jobs effectively for years and built a valuable human capital along the way.

At the same time, SIECs should craft agreements with the understanding that change is inevitable. The MOUs or other agreements should bind participants to the lowest level of authority required to commit those participants. They should also span the shortest duration allowed to justify expenditures (i.e., include a 10-year "sunset clause" to justify equipment appropriations for co-equal access spectrum). *"Consolidate, coordinate, cooperate—not create"* should be the maxim of SIEC formation. The new entity should not require new bureaucracy with the predictable costs and complexity or, at the other extreme, necessarily put anyone out of an existing job.

While these issues are representative, they are only a sample of the potential state law issues involved. The PSWN Program cautions all prospective participants in the SIEC process to work closely with state, local, tribal, and federal counsel and administrative agencies as appropriate to ensure compliance with all aspects of SIEC formation. From the outset, the process should be attuned to the individual state's laws, customs, procedures, and politics. The example in Section 3 of this document illustrates how these factors came into play in the State of Washington and describes that state's ongoing efforts to establish one of the first SIECs.



- Checklist of Key Elements to SIEC Development**
- It is important that federal entities and federal spectrum be included in SIEC planning process.
 - SIEC planners should review several elements of their state law in the early stages of this process
 - It is also important for those developing an SIEC to inherent authority of state political subdivisions (i.e., counties, townships etc)
 - SIEC should draw on processes and relationships that already exist rather than form new ones
 - SIECs should craft agreements with the understanding that change is inevitable

3. WASHINGTON STATE EXPERIENCES

3.1 Background

The State of Washington covers an area of more than 71,300 square miles and has diverse topography and geography that make communications and interoperability a challenge for public safety. The topography ranges from coastal rainforests to glaciers, sea level to high mountains, with the Olympic Mountains on the northwest peninsula and the Cascade Mountains, including Mt. Rainier, dividing the state east-west. The state has more than 2 million acres of forestland and a shoreline of more than 3,000 miles, which attract both commercial activities, such as logging, fishing, and shipping, as well as recreational visitors year round. Bordered by Canada to the north and the Pacific Ocean to the west, international and maritime coordination are also significant challenges to interoperability. In recent years, the state has suffered a variety of natural disasters, including floods, earthquakes, wildland fires, tsunamis, and volcanic activity.

Technically, Washington is generally representative in the area of public safety communications. State, tribal, and local public safety agencies operate across multiple frequency bands. Washington's geography and common borders with Idaho and Oregon, its international border with Canada, and a significant maritime environment add complexity to radio system design, operation, and interoperability.

Washington's state governmental organization is typical of most western states, with a departmental structure, administration, and legal code based largely on the federal model.¹⁰ Officials who are appointed by the Governor direct most state agencies, but officials who are independently elected or appointed by other authorities direct some other agencies.

Local governments have a high degree of autonomy and each has its own elected executive. They have departmental structures similar to the State's, with responsibilities to their own geographical areas and constituents. Generally, all city and county government entities have a long history of cooperation with each other.

Each state agency is responsible for acquiring and managing its own information technology (IT) resources. However, the independent Information Services Board (ISB) has responsibility for developing statewide IT policies and adopting statewide technical standards, and has approval and oversight authority over major IT projects. The ISB is composed of 15 members from all three branches of government, including four members of the legislature, and two members from private industry (currently Bechtel and Weyerhaeuser). It has authority over the executive and judicial branches, but not the legislature, and meets five times annually. The governor's counsel currently serves as chair.

The Emergency Management Division of the state Military Department is concerned with disaster response, including coordination with other state agencies and local jurisdictions. This function is conducted at the state Emergency Operations Center under the Incident Command System (ICS). The Emergency Management Division also interfaces as necessary with federal agencies for disaster, large-scale, or other critical operations. As a state-level agency

¹⁰ See Washington State Government Organizational Chart (Attachment F.).

coordinating statewide, interoperability is the single biggest issue for the Emergency Management Division.

In addition to the state agency presence, there is a significant federal emergency response presence within Washington's public safety community. These agencies are working with state, tribal and local entities on task forces and multijurisdictional activities.

The practical and financial obstacles facing interoperability development in Washington State are also typical of other states. The state needs robust and reliable funding sources to support interoperability and new system development. Land mobile radio (LMR) systems are typically outside the expertise and authority of statewide boards and committees, whose members are primarily political or civil service appointees from outside the public safety or communications communities. This knowledge gap creates difficulty communicating the need and criticality of interoperability and in turn may thwart favorable funding decisions. New system development requires significant investment that many agencies cannot afford within existing budgets.

Several state agencies in Washington face the replacement of existing systems necessitated by age. The four primary state agency LMR users are the Washington State Patrol (WSP), the Emergency Management Division (EMD), the Washington State Department of Transportation (WSDOT), and the Washington Department of Natural Resources (WDNR). The WSP, EMD and WDNR have conventional (analog) very high frequency (VHF) radio systems and associated components that have remained in service well past their intended service life expectancy. Vendors no longer support many of the critical components. A 1999 value engineering study of the WSP's emergency communication system concluded that the WSP would require more than \$160 million over the coming 10 years to simply maintain the existing system. The WSDOT 800 MHz system has become obsolete due to technological changes. Local government agencies face similar circumstances with their LMR systems. Although wholesale replacement of systems is not out of the question, the general political climate in the state would favor using legacy infrastructure to the maximum extent possible before resorting to complete change-out. Moreover, the more often state entities can combine their rehabilitative efforts, the more favorably budget officials are apt to look upon funding requests.

To maintain compatibility with legacy analog equipment, Washington State has not yet converted to digital LMR systems. WSP, EMD, WSDOT, and the WDNR have collocated sites across the state and have historically coordinated quite well on LMR issues and procurements. They have also historically shared responsibility for LMR planning within the state. The collocation and sharing of communications infrastructure has created a strong relationship among these agencies and provided a firm foundation to move forward on interoperability initiatives.

The Department of Information Services (DIS) assists agencies with IT planning support. DIS assigns a Senior IT Consultant to each agency to provide guidance and advice about IT resource acquisition and management. In particular, the Consultants assist in developing risk assessment documentation for proposed IT projects. The Consultants also serve as part of ISB staff. Historically, neither the ISB nor DIS has been involved in LMR projects.

Historically, Washington State agencies, including WSP, EMD, WSDOT, and WDNR use blanket LMR procurement vehicles. This is unlike the procurement methods used by numerous other states. These vehicles significantly reduce administrative costs associated with managing multiple contracts and leverage economies of scale in procurement efforts. Washington's primary LMR vehicle is the Radio Communications—Two-Way Radio Equipment contracts. These multi-million dollar contracts allow both state and local authorized purchasers included in the Washington State Purchasing Cooperative (WSPC) to purchase portable, mobile, and base station radio equipment.¹¹ Washington State agencies have also used a multi-state consortium procurement vehicle to purchase equipment at reduced rates.

Washington has handled wireless coordination issues as part of standard operations over the past few years. However, because of the new 700 MHz FCC allocation, the state expanded and expedited its coordination efforts to take advantage of this window of opportunity. The Nisqually earthquake, discussed later, has also raised awareness among the public and senior state officials to expedite the process.

In its digital television (DTV) allotment proceedings, the Federal Government has addressed but not resolved the 700 MHz issues with Canada. It may remain a difficult interoperability issue to handle because of the necessity of continuing to work through diplomatic channels with the Department of State and the FCC's International Bureau. Within Washington State, specific interoperability issues between local jurisdictions or among state, tribal, and local jurisdictions are typically handled on a case-by-case basis. However, although the state does regularly coordinate with local jurisdictions on LMR systems to a limited degree, APCO supports most of the local LMR coordination. Fortunately, many agencies in the state have a long-standing tradition of interoperability cooperation.

The ISB had previously formed the Justice Information Committee (JIC) to provide planning and oversight for multijurisdictional justice information projects such as the Justice Information Network (JIN).¹² The JIC consists of agency directors and local government representatives. Because radio interoperability and related issues are outside the scope of typical JIC projects, the JIC formed the Radio Interoperability Subcommittee. The subcommittee is composed of radio system managers and representatives from state agencies, fire, and local law enforcement. This committee was tasked to formalize a recommendation to address the issue of radio interoperability.

3.2 History of SIEC Development in the State of Washington

The process of planning and creating an SIEC can be a time-intensive and potentially frustrating process. The key to Washington's relative success thus far lies in four areas: effective planning, a strong foundation of support, incremental steps in developing the SIEC structure, and a firm understanding of potential hurdles associated with interoperability.

¹¹ State of Washington Contract Number 08497, *Radio Communications – Two Way Radio Equipment*, Washington State Department of General Administration, Office of State Procurement. Olympia, WA Revised September 20, 1999.

¹² See JIN Blueprint, *Digital Justice*, 2001–2003 Integration. (See Attachment G.)

Based on observations of the operational environment in Washington over several years, going back as far as the disastrous Mt. St. Helens eruption in May 1980, public safety officials long realized the value of coordinating interoperability throughout the state. The Chief of WSP formally addressed interoperability issues with the ISB in July 1999. As a result, the Radio Interoperability Subcommittee recommended a legislative budget request to conduct a statewide radio interoperability study. The intent of the study was to develop a baseline of existing systems and provide a framework for future system development to encourage interoperability. The WSP submitted this budget request to fund the study in 2000, but it was not successful. Subsequently, the subcommittee proposed establishing and empowering an executive-level board. This board would make policy decisions and funding requests regarding radio system interoperability and development.

In February 2001, the Radio Interoperability Subcommittee took the lead in developing an SIEC recommendation based on information it had received from the PSWN Program. Subsequently, the Radio Interoperability Subcommittee formulated a recommendation for the formation of a SIEC. Based on the recommendation, the SIEC would be charged with the drafting an interoperability plan and developing a strategy among existing systems and future systems. In addition, the SIEC's responsibilities were to include managing interoperability and state-assigned frequencies in the 700 MHz band. The subcommittee presented this recommendation to the JIC in late February 2001. This timing proved significant.

At 10:55 a.m. (PST) February 28, 2001, a major earthquake occurred in the greater Puget Sound region. The earthquake registered 6.8 on the Richter scale, causing 200 injuries and more than \$1 billion in property damage. The event, now officially known as the Nisqually earthquake, set the SIEC process on the fast track in Washington State.

Immediately following the earthquake, the commercial telephone system bottlenecked. This rendered cellular, personal communications services (PCS), paging and other private wireless services effectively useless in the affected areas. The equipment did not go down or fail—the system just became overloaded. The telephone companies restricted incoming calls from out of the earthquake zone, which further hampered the public's already limited communication capabilities. In sharp contrast to the pervasive loss of service to commercial telecommunications, Washington's comprehensive public safety communications networks fared far better. Fire and law enforcement agencies using dedicated systems reported no loss of or damage to service. The dedicated networks even permitted a clear option for public safety agencies to work around the commercial blockage using equipment that would have otherwise been ineffective.

The WSDOT radio system performed similarly without incident. Personnel could communicate between offices in Olympia and Seattle, and the system neither slowed down, as it could have under overload conditions, nor dropped any calls. Both the WSDOT and WDNR networks also continued to operate despite temporary building evacuations.

These and other experiences unquestionably demonstrated the value of dedicated public safety systems as opposed to reliance on commercial providers. At the same time, however, the Nisqually earthquake revealed the serious shortcomings of standalone systems with little or no capacity to interoperate.

Moreover, although individual public safety agency networks performed effectively, many raised the concern that communications outside of individual agencies could be problematic. The State Emergency Operations Center had no interoperability issues only because the center had a radio from each of the independent networks. The center also relied on the Amateur Radio System to receive reports on damage from around the state. At the state government complex in Olympia, it was, at times, necessary to use runners to communicate between agencies. The Radio Interoperability Subcommittee subsequently developed a lessons learned report detailing the effects of the earthquake and incorporating a recommendation that the subcommittee had been putting together concerning the creation of an SIEC.¹³ The consensus was that greater interoperability among agencies would be an essential step in improving incident response.

On June 12, the Chief of the WSP, along with a representative of the PSWN Program, formally presented to the ISB the recommendation of the JIC to form a SIEC. The presentation received a favorable response from the ISB. The ISB tasked the WSP to convene the first SIEC meeting. Additionally, the ISB tasked the WSP to apply for the 2.4 MHz state license from the FCC. The WSP prepared a draft letter to the governor for submission to the FCC, with the FCC Form 601 application for the 2.4 MHz license attached for his signature pursuant to the Public Notice.¹⁴ This letter highlighted the state's intention to form an SIEC.¹⁵

Currently, identified and prospective participants continue to engage in discussions on how to form the SIEC under the umbrella of the governor's authority. Once participating entities sign the MOUs as expected the initial stages of convening the SIEC with their representatives will proceed.

3.3 Foundations of Support

The legal and administrative structure of Washington State is conducive to cooperation at all levels. Conversely, several other states, particularly in eastern regions, have strong, centralized chief executives with little or no inherent power delegated to political subdivisions. In Washington State, the power of the central state government is somewhat more limited, with state, tribal, and local governments enjoying a high degree of autonomy. Executive orders issued by the governor are only binding on officials actually appointed by the governor; all other elected officials, including the local city managers, are exempt. Although the state has a great deal of discretion, regarding funding decisions, unfunded state mandates to local governments have been prohibited as a result of citizen initiatives.

The legislature, which meets for either 60 or 105 days per year, has long encouraged intergovernmental agreements, including those with tribal entities. There is a long history, going back to interjurisdictional school, public health, and transit authority agreements in the 1960s, of

¹³ Interoperability Subcommittee Lessons Learned, March 2001, [rev. July 2001], attaching JIC Interoperability Subcommittee Recommendation February 26, 2001. (See Attachment H.)

¹⁴ FCC Public Notice, February 15, 2001, *supra*.

¹⁵ Letter from WSP Chief James LaMunyon to the Hon. Gary Locke, Governor of the State of Washington, June 27, 2001. (See Attachment I.)

breaking down “balkanization” of government entities. The JIN itself was such a project and was established by an MOU. All law enforcement agencies have mutual-aid compacts with surrounding jurisdictions that include use of public safety answer points (PSAP) and access to the National Crime Information Center (NCIC) 2000.

For Washington, these precedents provide an excellent foundation for broad-based support. The state applied for the 700 MHz license, and presumably, other spectrum licenses related to interoperability

3.4 Leveraging Relationships

The WSP CIO, supported by the Information Technology Division, has been one of the primary participants and strong advocate in statewide LMR updating and acquisition with interoperability as a primary focus. The CIO himself and WSP as an organization were well suited to assume the responsibility of the chair of the JIC Radio Interoperability Subcommittee. The subcommittee is currently composed of representatives from several state and local agencies. These include WSP, WDNR, King County, WSDOT, Department of Corrections (DOC), Emergency Management Division, Washington Department of Health, Washington State Department of Information Services, the Washington Association of Sheriffs and Police Chiefs (WASPC), the Washington State Association of Fire Chiefs (WSAFC), the Harborview Medical Center, a local fire department, and the JIN. The support garnered and networking established through two years of coordination and discussion proved essential. Absent a mature working relationship and coordination, this would have been a difficult task to pull off, with or without the catalyst of the earthquake.

It is critical to keep in mind that such broad interagency support for interoperability existed well before the Nisqually earthquake. As mentioned, the ISB was in place and operational in 1999, with the Radio Interoperability Subcommittee taking on the role of developing the SIEC. Due entirely to circumstance, the SIEC process planning appeared to derive from, rather than merely coincide with the disaster, as was actually the case. More generally, other states should not view the earthquake (or any other major disaster) as forcing coordination of LMR systems. Rather, such incidents may serve as a “what if” scenario to make the case for interoperability in the planning process.

States developing and maintaining support for interoperability needs and an SIEC should note that the WASPC and WSAFC assumed roles as “champions” for SIEC formation early on in the process. Historically, interoperability initiatives in Washington have stalled because of political conflicts involving local jurisdictions, or between state and local jurisdictions. Therefore, the support of these statewide public safety associations has often been, and remains, crucial in aligning common interests in Washington. A unified voice is the goal in this process, and these associations, depending on their strength of membership and policy expertise, can have a significant impact.

As the planning process developed, it became apparent that natural synergies existed for the agencies participating in the SIEC for practical reasons. It was equally obvious, however, that the difference in impact of the SIEC on each agency, across the state as a whole, and on the FCC and outside entities, would be significant. In keeping with the FCC’s intent, the SIEC

would need to have executive-level authority, and not merely function as an advisory committee. Although the Radio Interoperability Subcommittee will not *become* the SIEC, it will fall under it organizationally and serve a support function as it gets off the ground.

Through their Radio Interoperability Subcommittee work, all of the primary participants in state LMR and representatives from local public safety associations have fostered relationships based on mutual trust and cooperation. These relationships have continued to evolve and have helped pave the way for a smooth SIEC transition. New policy formulation and coordination on potentially sensitive areas, such as radio equipment procurement and system development, will be less difficult because these relationships already exist. The most important relationship that benefits the state is that among the WSP, WDNR, EMD and WSDOT. Because these four organizations each have primary, ongoing responsibility for managing and operating independent statewide radio systems, they have already developed a healthy rapport that will also be critical to further the SIEC process.

3.5 Governor's Commitment

In keeping with the FCC's intent in the Fourth R&O, the administration of the SIEC, as the authorized state-level coordinator for interoperability will fall under the purview of the state's governor. Inasmuch as the governor's power is limited, this role demands a great deal of reciprocity, with a strong support commitment by the governor and consensus among the entities agreeing to participate in the SIEC.

In the case of Washington, the governor and his office have been heavily involved in the SIEC process. They support the need to formalize it through executive branch channels. Although SIEC planners in Washington do not anticipate an executive order will be required initially because of the factors discussed previously, the governor will have a substantial ongoing role in providing oversight and policy support.

The governor has authorized development of an MOU as the cornerstone of the SIEC. This MOU will, by design, reach across broad policy objectives common to all potential entities participating in the SIEC. Relationships will evolve and become more formalized, and responsibilities more clearly defined, as the process develops. Participants can then execute additional MOUs or other documents, potentially including draft executive orders or statutes, as needed.

The governor and his staff have been involved early and conducted extensive data gathering on SIECs and their potential implications for the state. The governor appointed senior policy advisors to assess the SIEC concept and planning process and most importantly to anticipate whether the policies of the SIEC would be "mandated," which, in turn, would require state funding. Directing agencies to update or build new radio systems is a road the governor did not want to take, particularly because the state has a statute requiring the state to pay costs that of new or enhanced programs or services it mandates on local governments. This further highlights the need to keep SIEC formation within the state's established legal and administrative boundaries.

The governor's office was also interested in how the SIEC would fit into the governmental structure. Because the ISB was an intact, mature, and operational board, it seemed a natural fit to let the SIEC fall directly under the ISB's oversight.

As the formal administrative step in initiating the SIEC process, the chief of the WSP requested that the governor apply for the 2.4 MHz of state licensed spectrum in the 700 MHz band.¹⁶ Accordingly, the governor's office provided a letter attaching the required FCC Form 601 license application requesting a license from the FCC on behalf of the SIEC.¹⁷ Washington State expects the FCC to issue this license to the governor as it has for other states expressing the intention to form SIECs or equivalent organizations.

3.6 Incremental Steps

A key to Washington's success thus far in creating an SIEC has been its ability to move forward with small, incremental steps. By identifying key opportunities to move forward, developing a broad MOU, and maintaining a simple approach to SIEC staffing, the participants have done a good job of easing into a potentially complicated process.

The FCC's allocation of 2.4 MHz of spectrum was an ideal opportunity for the Radio Interoperability Subcommittee to engage decision makers to create a formal committee with the authority to implement solutions. Only limited time was available to apply for the additional spectrum, and the governor had to submit the application. Washington therefore took the next logical step taking the opportunity to gain additional state-licensed spectrum in the 700 MHz band, but establishing a unified committee to manage interoperability issues throughout the state.

The Nisqually earthquake was, however, the key opportunity to make the final SIEC push with decision makers. Although the Radio Interoperability Subcommittee laid a firm foundation and would have moved forward with the process anyway, the media focus on interoperability issues following the earthquake created a window of opportunity. The Radio Interoperability Subcommittee effectively used this window to bring the issue of SIEC development to the forefront of state policy. Making a case for interoperability with a natural disaster backdrop was a smart step for state executives.

The Radio Interoperability Subcommittee spearheaded the drafting of an MOU with direct support from senior state policy advisors and oversight by the Department of Information Services. As noted previously, the intent was to create a broad MOU with fundamental goals that were common to all participants. These goals included developing policy to support interoperability, seeking support in the form of funding for a state system, making legislative recommendations, and managing the 700 MHz band.¹⁸ Conversely, the drafters of the MOU avoided restrictive clauses, bylaws, and complicated language that would discourage participants and potentially hamper the newly formed entity with unnecessary complexity.

¹⁶ Chief LaMunyon Letter to Gov. Locke, June 27, 2001, *supra*

¹⁷ Letter from Governor Gary Locke attaching FCC Form 601, (See Attachment J.)

¹⁸ Sample Washington SIEC MOU text. (See Attachment K.)

The Radio Interoperability Subcommittee and the four major state LMR operators (WSP, WSDOT, EMD and WDNR) made a commitment to refrain from recommending a SIEC bureaucracy. Obviously, funding a new unit or committee in government is a difficult task. State officials may be wary allocating monies for technical management, staff, and an operating budget. Washington is attempting to avoid such a large initial outlay. In the early stages, the Washington SIEC will likely rely heavily on temporarily assigned personnel from the participating agencies until permanent staff reallocations can be determined as needs, efficiencies, and priorities become apparent.

As SIEC responsibility grows, coordination becomes more involved and complicated, and priorities become clearer, formal budgetary requests or reallocations may eventually become necessary. At this stage, however, easing into the work with borrowed staff seems to be the best approach. In keeping with its policy of fiscal conservatism, the SIEC intends to move deliberately but cautiously through a series of calculated moves. Equipment purchases, spectrum sharing, and joint frequency coordination will all take place based on advanced planning and solid preexisting relationships. The objective is to raise the level of involvement in the SIEC at a deliberate pace.

Regarding the formal structure of the SIEC: although planners have considered executive orders or statutory action, these have been set aside for the present. All those involved view such measures as extreme or heavy handed given the spirit of cooperation and commitment to using incentives rather than mandates. The MOUs themselves will be broad in scope, forming general objectives at the outset and leaving the details for experience to resolve.¹⁹ As relationships become more formalized, the MOUs, a series of contracts, can be expanded by the participants collectively or individually to delineate specific limitations or responsibilities as required. Although Washington has not ruled out more formalized executive action or legislation in the long term, such actions would occur well into the future. They would be used, if at all, to memorialize the SIEC development process rather than direct it.

From the outset, the Washington SIEC had the benefit of a combination of astute policy advisors and highly experienced radio managers, both of whom were committed to a positive outcome early in the development process. Consequently, SIEC planners were able to anticipate hurdles that could stall the SIEC process if not understood early. Critical milestones, such as coordination requirements with local jurisdictions, tribal councils, contiguous states, and Canada, remain areas that the SIEC must eventually address. However, inasmuch as planners have already identified these areas, the SIEC will be prepared to address them in a timely and appropriate fashion as they arise. Also, specific spectrum-related issues concerning the 700 MHz public safety band and subsequent updating and procuring radio systems have been identified as items to be strategically addressed.

¹⁹ *Id.*

3.7 Funding Issues

Another major looming impediment to interoperability that Washington State has already begun to address concerns funding. Beyond finding funding to staff and operate an SIEC, planners recognize that although the MOU will not be a mandate to jurisdictions, it will represent an “encouraged course” of action. At the least, public safety entities and state officials will look to the SIEC to provide a clearinghouse of information. More importantly, they will see the SIEC as an advocate to encourage funding mechanisms to support interoperability transitions.

Washington State technology executives continually work with Office of Financial Management (OFM) personnel and are aware of the limits of opportunities to fund communications projects in an increasingly constrained state and local fiscal environment. It is envisioned that SIEC will have funding needs in two primary areas. First, funding will be necessary to replace, update, and improve aging systems to make them “forward” compatible on the interoperability spectrum. This funding will also permit leveraging current or emerging generation technology to enhance the number and reliability of features available for LMR voice communications. These enhancing features could include wireless data transfer, as well as slow-scan and full-motion video applications between base stations and field units. Also new systems will, for the foreseeable future, require “backward” compatibility with legacy systems that may remain in use for several years. This is important because it allows smaller governmental entities participating in the SIEC to interoperate on the cooperatively managed systems. Even with the compatibility issues resolved, as they must be, the cost of system development will be significant. Local budgets, primarily geared toward independent “stovepipe” systems, will find it difficult to obtain much of the sophisticated equipment designed for interoperability. They may also need to bridge current interoperability gaps, e.g., those between existing 800 MHz equipment and 700 MHz equipment yet to be developed.

Furthermore, existing federal funding initiatives are not adequate for local radio communications funding. State officials recognize that funding programs, such as the Office of Community Oriented Policing Services (COPS), are not geared toward communications. The COPS Office has provided technology funding through COPS Making Officer Redeployment Effective (MORE) since 1995. COPS MORE funding has historically been directed toward technologies that save officer time and, in turn, allow police departments to redirect officer time savings into community policing work. Communications technology lies on the periphery of this category because it is difficult to demonstrate time savings with improved radio communications systems. That is not to say that new CAD systems or field reporting software and related infrastructure are not communications oriented. For example, a grant funding a large-scale local law enforcement CAD and records management system (RMS) project may cover radio communications infrastructure. However, it may be difficult to advance the position to the COPS Office that radio communications alone would save officer time. Also important to note is that the COPS Office funds state and local law enforcement initiatives and not fire/EMS or emergency management initiatives.

The Local Law Enforcement Block Grant (LLEBG) Program from the Bureau of Justice Assistance (BJA) is also a possible source of funds for communications infrastructure for local agencies. Because LLEBG is less restrictive and provides blocks of funding in broad categories,

funding communications projects may be viable. Therefore, although more sparsely populated jurisdictions with lower crime rates may have infrastructure costs for wireless communications similar to those of more populous crime-impacted areas, they may not [?] receive nearly as much funding.

In addition to funding provided by the Department of Justice for public safety, the Department of Commerce offers the Technology Opportunities Program (TOP). TOP funds support “advanced telecommunications technologies in the public and non-profit sectors.”²⁰ The key to TOP grant-making is a plan that shows innovative uses of network technology that can, in turn, be used as a best practice for other agencies. These grants are extremely limited, and attainment is therefore very competitive.

Identified opportunities for funding are limited and unlikely to increase. However, Washington State’s communications expertise and planning efforts put it in a unique position to go after funding with multiple sources. Specifically, the SIEC, once formed, may approach grants from a consortium perspective. In addition, the SIEC will be in strong position to assist local jurisdictions in applying for grants. The real key to maximizing the SIEC construct is to coordinate state, tribal, and local agency grant applications, pool their resources, and leverage the economies of scale. Rather than fund dozens of stovepipe systems, the SIEC can pursue funding for a single, interoperable system, thereby reducing overall expenditures by eliminating duplication.

²⁰ U.S. Department of Commerce Web Site. http://www.ntia.doc.gov/otiahome/top/grants/briefhistory_gf.htm

APPENDIX A—ACRONYMS

APCO	Association of Public–Safety Communications Officials–International, Inc.
BJA	Bureau of Justice Assistance
CAD	Computer-Aided Dispatch
COPS	Community Oriented Policing Services
COPS MORE	Community Oriented Policing Services Making Officer Redeployment Effective
DIS	Department of Information Services
DOC	Department of Communications
DTV	Digital Television
EMS	Emergency Medical Services
FACA	Federal Advisory Committee Act
FCC	Federal Communications Commission
FLEWUG	Federal Law Enforcement Wireless Users Group
IAFC	International Association of Fire Chiefs
IACP	International Association of Chiefs of Police
ICS	Incident Command System
IRAC	Interdepartment Radio Advisory Committee
ISB	Information Services Board
IT	Information Technology
JIC	Justice Information Committee
JIN	Justice Information Network
LLEBG	Local Law Enforcement Block Grant
LMR	Land Mobile Radio
MHz	Megahertz
MOU	Memorandum of Understanding
NCC	National Coordination Committee
NCIC	National Crime Information Center
NPRM	Notice of Proposed Rulemaking
NPSTC	National Public Safety Telecommunications Council
NTIA	National Telecommunications and Information Administration
OFM	Office of Financial Management
PCS	Personal Communications Services
PSAP	Public Safety Answer Point
PSWN	Public Safety Wireless Network
R&O	Report and Order
RMS	Records Management System
RPC	Regional Planning Committee
SIEC	State Interoperability Executive Committee
TOP	Technology Opportunities Program
UCR	Uniform Crime Report
UHF	Ultra High Frequency
VHF	Very High Frequency
WASPC	Washington Association of Sheriffs and Police Chiefs

WDNR	Washington Department of Natural Resources
WSDOT	Washington Department of Transportation
WSAFC	Washington State Association of Fire Chiefs
WSP	Washington State Police
WSPC	Washington State Purchasing Cooperative