



Regional Plan for the Public Safety 700 MHz Band in Region 2 (Alaska)

Final Version
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Preamble

In order to help alleviate major wireless radio congestion, the Federal Communication Commission (FCC) has released 60 MHz of television broadcast spectrum – channels 60-69 (746-806 MHz) for use to land mobile radios. In addition to alleviating the congestion for wireless radio systems, the FCC also hoped to provide public safety access to new technologies that may require additional use of bandwidth, and promote interoperability. To accomplish these goals, the FCC allocated this spectrum as follows: 24 MHz for public safety, 30 MHz for commercial use, and 6 MHz for guard band.

Within the 24 MHz of spectrum for public safety, the following is a breakdown of how that bandwidth can be used:

- 1.6 MHz allocated for interoperability
- 8.0 MHz allocated for general use
- 2.4 MHz state license
- 12.0 MHz national public safety license

The Regional Planning Committee (RPC) is tasked with the administration and management of the 8.0 MHz general use spectrum. The State of Alaska has a State Interoperability Executive Committee who is tasked with the administration and management of the interoperability spectrum.

Section 1 – Regional Planning Committee Leadership

At the time of adoption and transmittal, the following individuals serve in leadership roles in the Region 2 Regional Planning Committee (RPC):

Chairperson Dean Strid
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From time to time, as described in our By-Laws, these positions will be subjected to re-election. At any such time that one of these three positions changes hands, the Chair will be responsible for taking the following actions:

- Providing notice to the FCC of the changes
- Providing notice to the NPSTC Support Office of the changes
- Modifying the Region 2 CAPRAD web site to reflect the changes

Such changes will not be considered Plan modifications, and will not require that this document be reissued to the FCC for public notice and comment cycles. Appendix A is the bylaws adopted by the RPC.

Section 2 – Regional Planning Committee Membership

Appendix B of this Plan lists the Voting and Non-Voting membership in the Region 2 RPC and the meetings they have participated in up to the point that this Plan was submitted to the FCC for approval. This listing will be kept current for all future meetings after Plan submittal and filed with the Region 2 plan documents.

Section 3 – Description of the Region

3.1 General Description

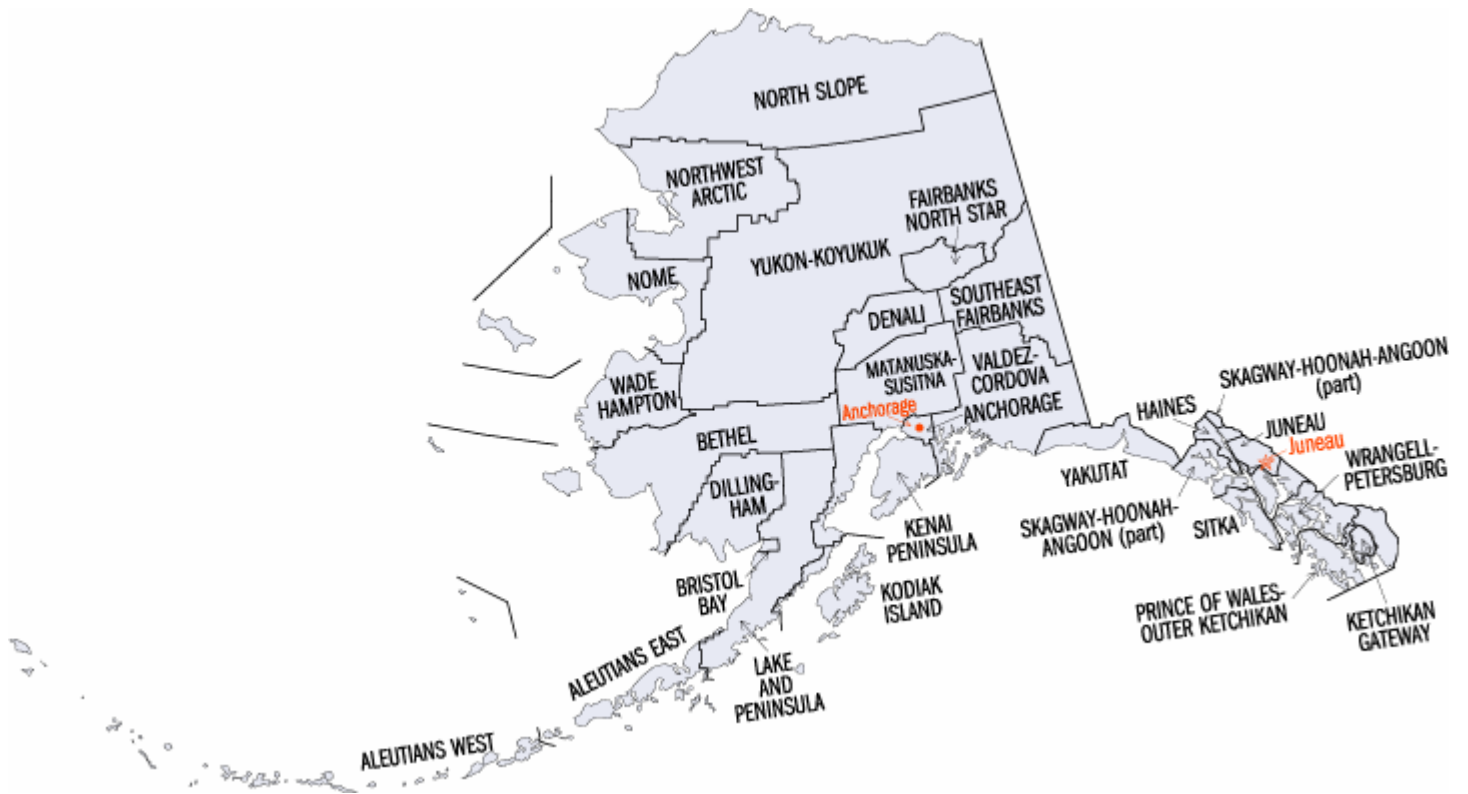
Region 2 encompasses the entire state of Alaska, consisting of 27 county like areas. Alaska is a single planning region for both the 700 MHz and 800 MHz public safety bands. Region 2 is bordered by Canada on the East, the Pacific Ocean on the South, the Bering Sea on the West and the Arctic Ocean on the North.

The State of Alaska has diverse geography and a varied population base. Ground elevations range from sea level to 20,320 feet (6,194 meters). Topography and distance divide the state into areas that have uniquely different population distributions, economic conditions, and climates. While much of the state is composed of wilderness or rural areas, there are significant areas of urban and sub-urban development as well. Most of these are in the central portion of the state, and the most significant of these is in the south-central area, from Kenai and Soldotna in the south to Fairbanks in the north.

Anchorage is the largest city in this region and along with the cities of Fairbanks, Juneau, Palmer, Wasilla, Kenai, and Soldotna contain significant population areas in the state. Other key areas in the state include the Trans Alaska Pipeline from the North Slope to Valdez. Remaining areas of Alaska have small concentrated areas of population separated by vast areas of mountains and tundra with very sparse population.

The Fairbanks and Anchorage areas require the majority of spectrum to support public safety services. All types of public safety agencies and services are located in this region. It is anticipated the majority of requests for voice/data spectrum will be from the Fairbanks and Anchorage areas.

There are no adjacent regions to Alaska.



There are 27 county like areas in the state with populations indicated in the table below:

Alaska	4/1/2000 Census	Land Area Square Miles	Population Density (1/mi²)	% of the State's Population
	626,932	571,395		
Anchorage	260,283	1,697	153.359	41.5%
Fairbanks-North Star	82,840	7,366	11.246	13.2%
Matanuska-Susitna	59,322	24,682	2.403	9.4%
Kenai Peninsula	49,691	16,013	3.103	7.9%
Juneau	30,711	2,717	11.305	4.9%
Bethel Census Area	16,006	40,633	0.394	2.6%
Ketchikan Gateway	14,070	1,233	11.409	2.2%
Kodiak Island	13,913	6,560	2.121	2.2%
Valdez-Cordova	10,195	34,319	0.297	1.6%
Nome	9,196	23,001	0.400	1.5%
Sitka	8,835	2,874	3.074	1.4%
North Slope	7,385	88,817	0.083	1.2%
Northwest Arctic	7,208	35,898	0.201	1.2%
Wade Hampton	7,028	17,193	0.409	1.1%
Wrangell-Petersburg	6,684	5,835	1.146	1.1%
Yukon-Koyukuk	6,551	145,900	0.045	1.0%
Southeast Fairbanks	6,174	24,815	0.249	1.0%
Prince of Wales	6,146	7,411	0.829	1.0%
Aleutians West	5,465	4,397	1.243	0.9%
Dillingham	4,922	18,675	0.264	0.8%
Skagway-Hoonah- Angoon	3,436	7,896	0.435	0.6%
Aleutians East	2,697	6,988	0.386	0.4%
Haines	2,392	2,344	1.021	0.4%
Denali National Park	1,893	12,750	0.148	0.3%
Lake & Peninsula	1,823	23,782	0.077	0.3%
Bristol Bay	1,258	505	2.492	0.2%
Yakutat	808	7,650	0.106	0.1%

3.2 Overview of Public Safety Entities in the Region

Alaska has a long history of a somewhat populist culture in which the number of local government bodies tend to multiply. The following is a brief description of the most predominate entities in the Region that will need to be accommodated by this Plan in some fashion.

3.2.1 Federal Agencies

The Region has the typical presence of federal public safety agencies with added presences by some agencies due to the significant number of international ports and our border with Canada. There is also a significant military presence in the Region with several large military bases. Due to the significant amount of State and Federal forest lands and national parks in the Region, there is also a significant amount of interaction between state and local fire agencies and the various federal agencies involved in fire suppression activities.

3.2.2 State Agencies

The Alaska State Troopers, the State of Alaska Department of Transportation and the State of Alaska Department of Natural Resources all play significant roles in providing public safety services. Additional State agencies have roles in providing public safety services to residents of the State of Alaska. The Division of Enterprise Technology Services of the Department of Administration provides telecommunications services to state agencies and is responsible for the implementation of systems using the 2.4 MHz of state spectrum in the 700 MHz plan. The Division of Emergency Services of the Department of Military and Veterans Affairs is responsible for providing statewide coordination of resources during extreme emergency or disaster conditions.

3.2.3 Borough Agencies

Boroughs are the "counties" in Alaska. Boroughs are responsible for operating public health programs and some extend this into operating basic and advanced life support services directly to the public.

There are also the normal array of other governmental services offered by boroughs that contribute to the public safety, including the operation of schools, public works and roads agencies, surface water management functions, water systems, sewage and sewage treatment systems, bus and transportation systems, etc.

3.2.4 City Agencies

The police department is the most common public safety service provided by incorporated cities. Many cities also operate a fire department and typically

these fire departments offer basic life support (and occasionally advanced life support) EMS services. Some cities have not formed fire departments and instead receive fire protection from fire protection districts that often pre-date the formation of the city and have larger jurisdictional boundaries than the cities. Cities also often provide services such as roads and public works functions.

3.2.5 E-911 and PSAPs

The State of Alaska has established a fully enhanced system which allows the public safety answering points (PSAP) to know the address and location of the 911 caller when making a call through the local exchange telephone network. There are 19 primary PSAPs within the state, including the Alaska State Troopers. The state is also addressing the need for wireless 911 service. Wireless enhanced 911 service is broken down into Phase I and Phase II service. With Phase I service the call back number and cell sector is displayed in the PSAP for 911 calls. Phase II service provides the call back number and the latitude and the longitude of the 911 caller.

In addition to providing 911 service, designated PSAPs also serve as National Warning System (NAWAS) warning points and Emergency Alert System (EAS) entry points.

The following is a list of the Primary PSAP Centers in Alaska:

- Anchorage Fire Department Dispatch
- Anchorage Police Department PSAP
- City of Fairbanks Regional Dispatch / PSAP
- Fairbanks International Airport PSAP
- Fairbanks State Trooper Dispatch
- Juneau Police Department PSAP
- Kenai Police Department Dispatch
- Ketchikan State Trooper Dispatch
- Matcom Public Safety Dispatch
- Palmer Police Dispatch (9-G-Base PSAP)
- Petersburg Police Department Dispatch
- Seward Police Department Dispatch / PSAP
- Sitka Police Department Dispatch / PSAP
- Skagway Police Department Dispatch
- Soldotna State Trooper Dispatch
- Ted Stevens Anchorage Int'l Airport Dispatch
- University of Alaska Fairbanks Dispatch
- Valdez Police Department Dispatch / PSAP
- University of Alaska Anchorage Dispatch

3.2.6 Native Organizations

Native organizations in Alaska are often a complex set of interactive groups that may have both collective and independent goals and activities. The view from outside of the Native world may only see a small portion of a nation's representation by way of the usual media of radio, television, or newspapers.

In total, there are 13 Native regional corporations, 168 village corporations, 13 major regional non-profits, 226 traditional/IRA councils, four urban corporations, and Alaska's only reservation, Metlakatla. Alaska has 230 federally recognized tribal entities. Tribal sovereignty in Alaska is an extremely complex issue. For example, when receiving state funding, these entities are required to sign a Waiver of Sovereign Immunity. This also occurs when tribal entities request both state and federal disaster relief funds. As a result of this process, the State of Alaska typically applies funding and other resources directly to local organized government entities. While these resources aren't provided directly to tribal entities, the members of these entities receive direct benefit from local investments.

In order to ensure the Alaska Statewide Communications Interoperability Plan (SCIP) addresses the needs at the tribal level, the following governmental and non-governmental agencies provided input. These agencies provide for many of the public safety investments in Alaska that benefit tribal entities at the local level.

- Alaska State Trooper Village Public Safety Officer Program
- Division of Fire and Life Safety Code Red Program
- Alaska Regional EMS Council Directors
- Alaska Council on Emergency Medical Services
- Alaska Fire Chiefs Association
- Alaska Association of Chiefs of Police
- Alaska Native Tribal Health Consortium

3.3 Existing Interoperability and Mutual Aid Agreements

There are a significant number of established interoperability systems and standards in place within the State of Alaska. The listing below is relatively complete and provides users of this plan information about non-700 MHz interoperability opportunities in the Region.

- State wide public safety simplex – 155.250 MHz, is used for coordination between state and local police entities throughout the state. This mutual aid channel can be used by state and local public safety agencies at the scene of an incident using only mobiles and/or portables.

- State Command and Control – 155.295 MHz is for coordination of incidents by higher level responders. This frequency is managed by the State of Alaska Department of Military and Veterans Affairs. This is a mutual aid channel which can be used by state government entities and departments for command, control, and coordination at the scene of an incident.
- State wide emergency medical simplex – 155.160 MHz, is used for coordination between state and local emergency medical responders throughout the state. This is a mutual aid channel to be used when conducting emergency medical operations using only mobiles and portables.
- The State of Alaska, Department of Natural Resources, Division of Forestry works with federal (BLM) and local fire suppression agencies to respond to wild land fires. These agencies have developed and utilize interoperability plans when responding at the scene of an incident.
- NPSPAC 800 MHz Interoperability Channels – In addition to the above, Region 2 has adopted CALL and TAC channels in the NPSPAC band. The frequencies shown are post-rebanding and the channel names are from the NPSTC Channel Naming Report June 2007 (Appendix F).

National Calling Channel (8CALL90):	806/851.0125 MHz
National Working Channel (8TAC91):	806/851.5125 MHz
National Working Channel (8TAC92):	807/852.0125 MHz
National Working Channel (8TAC93):	807/852.5125 MHz
National Working Channel (8TAC94):	808/853.0125 MHz

Note 1: The 8CALL90 channel shall be used to contact other users in the Region for the purpose of requesting incident related information and assistance. If necessary, the calling party will be asked to move to one of the TAC channels for continuing incident operations or other interoperability communication needs. This channel can be implemented in full repeat mode.

Note 2: The ITAC channels are to be used primarily for coordination activity between different agencies in a mutual aid situation, or emergency activities of a single agency. Incidents requiring multi-agency participation will be coordinated over these channels by the agency controlling the incident. These channels can be implemented in full repeat mode.

- Nationwide VHF Interoperability Frequencies – Region 2 has adopted the following frequencies for public safety interoperability. The frequencies shown and the channel names are from the NPSTC Channel Naming Report June 2007.

National Calling Channel (VCALL10):	155.7525 MHz
National Working Channel (VTAC11):	151.1375 MHz
National Working Channel (VTAC12):	154.4525 MHz
National Working Channel (VTAC13):	158.7375 MHz
National Working Channel (VTAC14):	159.4725 MHz

Note 1: The VCALL10 channel shall be used to contact other users in the Region for the purpose of requesting incident related information and assistance. If necessary, the calling party will be asked to move to one of the VTAC channels for continuing incident operations or other interoperability communication needs.

Note 2: The VTAC channels are to be used primarily for coordination activity between different agencies in a mutual aid situation, or emergency activities of a single agency. Incidents requiring multi-agency participation will be coordinated over these channels by the agency controlling the incident.

- Alaska Land Mobile Radio System (ALMR) – A partnership of Federal, State, and Local public safety entities operates a wide area VHF Project 25 trunked radio network. This network is an APCO Level 6 interoperability standards-based shared system with coverage of areas in Alaska containing approximately 80 % of the state's population. There are numerous common talkgroups built and programmed into this system to provide interoperability between the various entities using the system. There are also numerous common conventional frequencies programmed into ALMR mobiles and portables for use on VHF repeaters and as simplex to use existing conventional infrastructure. This allows conventional VHF radio users to have interoperable communications with agencies that use the trunked system.
- Hospital Emergency Administrative Radio (HEAR) – 155.340 MHz is a common channel used by hospitals for communication with ambulance services for medical control. This channel can be used while at the scene or enroute to the emergency medical facility. Licensing for use of this channel is requested through the Federal Communications Commission (FCC).
- The State Interoperability Executive Committee (SIEC) has the responsibility to develop a plan of interoperability in the state. Appendix E is a copy of the current State of Alaska Interoperability Plan.

3.4 Impacts on Existing Plans as a Result of Adding 700 MHz Interoperability Channels

The addition of public safety systems in another frequency band will increase the overall interoperability challenges rather than lessen them. While in some circumstances, existing systems will be replaced by 700 MHz systems, in others 700 MHz systems will add to the communications options available in an area.

Therefore, it will be extremely important as new 700 MHz systems are planned and deployed for the sponsors of those systems to be well informed of other legacy systems in all other bands that are operating in their area, or in locations where they may be called upon to render mutual aid assistance. Since we will likely never see the day where all public safety communications systems operate in a single band and under a single technology, only good interpersonal communications and good system planning

will allow us to sustain reasonable levels of interoperability in an ever more complex environment.

The most common strategy that has been followed in the past, and this Plan anticipates will be followed in system deployments in this band, is the concept of new systems incorporating appropriate interoperability into their plans and designs, instead of expecting legacy systems to figure out how to operate with the new-comers. It is not enough for the new systems to meet the interoperability requirements within the Plan for that band (700 MHz or 800 MHz); they also need to provide mechanisms to interoperate with VHF and UHF users to a level that is appropriate for their operations.

Typically this is accomplished through some mix of fixed infrastructure or transportable equipment that can accomplish cross-band and cross-system patches. These approaches have proven to be effective in meeting many interoperability needs within this region and across the country, and this Plan anticipates further deployment of these technologies as systems are implemented in the 700 MHz band.

Section 4 – Information and Notification Process

Region 2 is comprised of the State of Alaska and political subdivisions. Sixty days prior convening the initial 700 MHz Regional Planning meeting, notices were sent electronically to the FCC Wireless Telecommunications Bureau and the Associated Public Safety Communications Officials National Office.

After the initial meeting, notifications have been posted at various public safety websites in Alaska. Notifications have been distributed to all agency members that provided email addresses along with FCC Public Notices. Also, notifications have been distributed to all agency members of the ALMR system that provided email addresses.

The first meeting was scheduled and held on May 22nd, 2003 at the State of Alaska Information Technology Building, 5900 East Tudor Road, Anchorage, Alaska.

Section 5 – Regional Plan Summary

5.1 Procedure for Frequency Coordination

The RPC will initially utilize and refer to the frequency sort initiated by NPSTC and loaded into CAPRAD. The RPC has the ability to accept recommendations and the authority to change the original frequency sort that has been pre-loaded. In order to keep the most effective frequency allotments within Region 2, all frequencies will be available in all areas, subject to interference review and approval by the Technical sub-committee.

Applicants must submit an application to the RPC so the committee can ensure the application complies with all elements of the regional plan. The elements of this application are to be shown on FCC form 601. If approved, the RPC will make sufficient notification to the applicants selected FCC Certified Frequency Coordinators through the CAPRAD database. This process meets the requirements of Rule §90.176(c).

5.2 Technical Subcommittee

The primary responsibility of the Region 2 Technical subcommittee will be to review applications from agencies within the region for conformance to plan requirements. The Technical subcommittee will have access to the National Public Safety Telecommunications Council (NPSTC) Computer Assisted Pre-coordination and Resource Database System (CAPRAD) pre-coordination database system, and will review and recommend approval of applications, as they are received in the system. Applications approved by the RPC will be forwarded to the selected coordinator, then to the FCC for licensure. The membership of this committee will consist of the Technical subcommittee chairperson, and three other members of the RPC selected by the RPC chair. Membership of the Technical subcommittee will be determined at the annual meeting.

The Technical subcommittee duties are as follows:

- Review applications for compliance to the Region 2 Plan;
- Review appeals, applicant clarifications and applicant presentations;
- Recommend approval or denial to the RPC Chair;
- Maintain coordination with FCC certified frequency coordinators and advisors;
- Update CAPRAD;
- Work with the Alaska SIEC in the development of a statewide interoperability plan;
- Review application interoperability plans for conformance to the SIEC plan;
- Annually review and update the Region 2 plan as necessary;
- Monitor various system(s) implementation progress;
- Communicate with applicants to determine if implementation of their systems is in accordance with provisions of their applications;
- Make recommendations to the RPC on applicants that fail to implement systems.

5.3 Procedure for Requesting Spectrum Allotments

Upon completion and approval of this Plan by the FCC, requests for frequency assignments will be accepted. Agencies desiring allocations shall submit a request in writing to the Regional Planning Chairperson indicating their need for frequencies. The request will be considered as long as it provides no evidence of harmful interference to other users. Agencies need to provide justification for use of the spectrum. Requests will be considered on a first come first serve basis with the postmark as the tiebreaker. Other consideration taken into consideration for determination of the priority of application will be:

1. Users who are involved in the protection of life and property.
2. Multi-agency shared systems that multiple agencies agree to construct a common infrastructure (i.e. State, City, Borough and others).
3. Large agencies with multiple divisions constructing a common system for all to use (i.e. A large city or borough with multiple divisions).
4. Trunked use of the frequencies.
5. Approved funding to construct the system using the 700 MHz frequencies.
6. A statement of the future intentional actions of any currently licensed channels that will be replaced by a new 700 MHz system, and how it may benefit other agencies in Alaska by releasing these channels back into the Public Safety pool.
7. Implementation of national interoperability capability.

Agencies will need to fully document technical information, sites, tower heights, area of coverage, ERP of transmitter sites, along with any other technical information required for RPC subcommittee review and coordinator review. Agencies are expected to construct systems with maximum signal levels in their coverage area and minimum signal levels in co-channel user's coverage areas. Coverage area in the context of this plan will be defined as the geographical boundaries of agency(s) served by the system plus eight miles. The RPC realizes that radio signals don't stop at political borders. Our attempt is to maximize the use of the frequencies by packing as many users as possible per channel.

Upon completion of an initial review of the application, the RPC will forward copies to each of the existing 700 MHz users for concurrence by posting this information on CAPRAD. Should concerns exist the agency will reply in writing to the RPC Chairman for consideration by the technical committee. The agency applying will be allowed to make modifications to the application.

5.4 Adjacent Region Spectrum Allocation and Coordination

There are no adjacent regions to Alaska. Coordination along the Canadian border East of Line C will require coordination with the CRTC, (Canadian Radio-Television and Telecommunications Commission), through Public safety frequency Coordinators. A list of coordinators can be found on the FCC.gov web site, (<http://www.fcc.gov/pshs/public-safety-spectrum/coord.html#700800>).

5.5 Regional Plan Updates

Regional Plan updates will be performed by the Region 2 Technical subcommittee, and shall occur annually if necessary. The membership will consist of the Technical subcommittee chairperson and members of the Region 2 Planning Committee appointed by the RPC chair. Final approval of Regional Plan update will be approved during a general membership meeting. Upon approval, the updated plan will be submitted to the FCC for final review/approval if necessary.

5.6 Interoperability

Interoperability channels will be used in accordance with the NCC's recommendations.

Section 6 – Interoperability

6.1 Introduction

The ability for agencies to effectively respond to mutual aid requests directly depends on their ability to communicate with each other. The State of Alaska is subject to natural disasters such as floods, earthquake, and wild land fires and mutual aid is common among agencies. This plan seeks to facilitate the communications necessary for effective mutual aid.

The State of Alaska will administer the interoperability channels via its State Interoperability Executive Committee (SIEC) under National Coordination Committee's (NCC) guidelines. In addition to the role described within this document, Alaska's SIEC will be pursuing other activities relating to Interoperability outside of the 700 MHz spectrum, including assisting in the coordination of interoperability spectrum resources at VHF, UHF, and 800 MHz.

The State of Alaska adopts the ANSI/TIA 102 Standards, i.e. Project 25 digital protocols, as the Digital Interoperability Standard for the conventional-only mode of operation on the narrowband voice & data interoperability channels as adopted by the NCC. The State of Alaska adopts the NPSTC Standard Channel Nomenclature for the Public Safety Interoperability Channels (Appendix F). Equipment using an alphanumeric display shall show the recommended label from the table in Appendix F when the radio is programmed to operate on the associated 700 MHz channel set.

There are 2 Calling channel sets and 30 Tactical channel sets. Channel sets are comprised of two 6.25 kHz channels each.

The Tactical channel sets are subdivided into the following categories for the State of Alaska:

- 4 for Emergency Medical Services
- 4 for Fire Services
- 4 for Law Enforcement Services
- 2 for Mobile Repeater operation
- 2 for Other Public Services
- 12 for General Services, and
- 2 for Data

While defined as intended for specific operational needs, the Tactical channel sets may be assigned for alternate uses by the Incident Commander. As an example, the Incident

Commander may find that a fire channel is the only Tactical channel resource constructed in an area where an EMS response is called for. Under these circumstances, functional reassignment of the channel may be made on a coordinated basis for the duration of the incident under direction of the Incident Commander.

6.2 Calling Channels

The State of Alaska operates two Calling channel sets. The Calling channels set designations within Alaska are "7CALL50" and "7CALL70" (Appendix F). These calling channel sets shall be monitored, on a 24 x 7 basis, by licensees who employ 700 MHz channels from the general use or state pool as a part of their infrastructure. When calling channels are integrated into infrastructure, their mobile coverage must at least match the coverage of the other channels in the system. In addition to the usual calling channel functions, the calling channels may be used to notify users when a priority is declared on one or more of the tactical interoperability channels.

6.3 Requirement for Infrastructure to Support Interoperability Channels

All agencies requesting more than four channels from the 700 MHz channel pool for normal operations will be required to implement at least one of the CALL channels in a repeater mode. This implementation shall normally provide mobile area coverage over essentially the same service area as the primary communications channel assignments. The SIEC may authorize reduced coverage where such a reduction is required due to good engineering standards, interference mitigation or other specialized requirements. This infrastructure may be configured to operate in a half duplex mode to minimize intra-system interference under routine conditions, provided however that a wireline equivalent connection delivers received audio to a dispatch point where 24 x 7 monitoring will take place. Approval of such operation also requires the ability for the dispatch point to re-enable normal repeater operation when so requested.

Agencies requesting nine to fourteen channels are required to establish similar infrastructure for at least one additional law enforcement and one additional fire/EMS interoperability channel. Systems requesting more than fifteen channels will require implementation of a CALL channel, one law enforcement channel, one fire channel, and one EMS channel.

Agencies are encouraged to provide for additional interoperability channels and improved grades of service beyond the requirements establish in this Section.

Bandwidth Licensed	Required Number of Interoperability Repeaters
0 to 50 kHz	None
62.5 to 100 kHz	1 Call Channel
112.5 to 175 kHz	1 Call Channel 1 Law Enforcement Channel 1 Fire/EMS Channel

> 187.5 kHz	1 Call Channel 1 Law Enforcement Channel 1 Fire Channel 1 EMS Channel
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6.4 Tactical Channels

All interoperability channels, except as described below, shall be used for conventional-only operation. Normally, users will 'call' a dispatch center on one of the "Call Channels" and be assigned an available tactical channel. Deployable narrowband operations (voice, data, and trunking) shall be afforded access to the same pool of channels used for similar fixed infrastructure operations. In the event of conflict between multiple activities, prioritized use shall occur. Use prioritization shall be:

1. Disaster and extreme emergency operations for mutual aid and interagency communications.
2. Emergency or urgent operation involving imminent danger to life or property.
3. Special event control, generally of a preplanned nature (including Task Force operations).
4. Single agency secondary communications. Priority 4 is the default when no higher priority has been declared.

6.5 Encryption

Use of encryption is prohibited on Calling channels and permitted on all other interoperability channels. In Alaska, the standardized encryption algorithm for use on the interoperability channels must be the Advanced Encryption Standard (AES). AES is the encryption algorithm currently used under federal, state, and local responses.

6.6 Deployable Systems

Alaska supports the use of deployable systems, both conventional and trunked. Deployable systems are prepackaged systems that can deploy by ground or air to an incident to provide additional coverage and capacity on interoperability channels. This strategy minimizes the expense of installing fixed infrastructure and recognizes the difficulty of providing complete coverage to Alaska due to many constraints.

General Public Safety Service Channels labeled 7TAC 51 through 7TAC 56, and 7TAC 71 through 7TAC 76, shall be available for "deployable" equipment used during disasters and other emergency events that place a heavy, unplanned burden upon in-place radio systems. Use of deployable conventional and trunked interoperability systems will be coordinated so as to minimize interference with permanently installed conventional interoperability infrastructure.

6.7 Trunking on the Interoperability Channels

Trunking the Interoperability channels for deployable or inactive, pre-positioned systems shall be permitted on a secondary basis to fixed conventional infrastructure. Such use shall be limited to operation on eight specific 12.5 kHz channel sets, divided into two subsets of four 12.5 kHz channels. One subset is defined by 7TAC 51 through 7TAC 54 and the other by 7TAC71 through 7TAC 74. Trunked operation on the Interoperability channels is intended to provide for heavy communications needs at specific locations and these channels are not intended to be used in the trunked mode for permanent operations. In future revisions to this Plan, the Alaska state SIEC anticipates developing additional plans which anticipate talkgroup structures, enabling the use of the interoperability spectrum for deployable or inactive, pre-positioned systems. Alaska elects not to permit 25 KHz trunking on the interoperability channels.

6.8 Standard Operating Procedures on the Trunked I/O Channels For I/O Situations Above Level 4

The safety and security of life and property determines appropriate interoperable priorities of access and/or reverting from secondary trunked to conventional operation. Access priority for "mission critical" communications shall be as follows:

1. Disaster and extreme emergency operations for mutual aid and interagency communications;
2. Emergency or urgent operation involving imminent danger to life or property;
3. Special event control, generally of a preplanned nature (including Task Force operations).
4. Single agency secondary communications. Priority 4 is the default priority when no higher priority has been declared.

The SIEC will determine whether a wide-area I/O conversation has priority over a local I/O conversation.

6.9 Data Only Use of the I/O Channels

Narrowband data-only interoperability operation on the Interoperability channels on a secondary basis shall be limited to two specific 12.5 kHz channel sets. One set is defined by 7DATA69 and the other by 7DATA89.

6.10 State Interoperability Executive Committees

The Alaska SIEC has adopted the Incident Command System (ICS) as a guideline in developing their regional interoperability plans.

The State of Alaska will hold the license on interoperability channels for all infrastructure and subscriber units within Alaska.

The State of Alaska will have oversight of the administration and technical parameters of the infrastructure for the interoperability channels within the state. The RPC recommends the use of the templates for a Memorandum of Understanding for Operating the 700 MHz Interoperability Channels (Appendix M) and a Sharing Agreement (Appendix N).

6.11 Minimum Channel Quantity

The minimum channel quantity for Calling and tactical channel sets requires 8 I/O channel slots in each subscriber unit. Including Direct (simplex) mode on these channel sets, up to 16 slots in each radio will be programmed for I/O purposes. Subscriber units, which routinely roam through more than one jurisdiction up to nationwide travel will require more than the minimum channel quantity.

The "CALL"ing channel sets (7CALL50 and 7CALL70) shall be implemented in all voice subscriber units in repeat-mode and direct (simplex) mode. "Direct" mode is permitted in the absence of repeat operation or upon prior dispatch center coordination. If the local CALLing channel set is not known, 7CALL50 shall be attempted first, then 7CALL70. Attempts shall be made on the repeater mode first then on the direct (simplex) mode.

A minimum set of "TAC"tical channels shall be implemented in every voice subscriber unit in the direct (simplex) mode. Specific channel sets are shown below.

7TAC56 and 7TAC75 channel sets
7MOB59 and 7MOB79 channel sets
7GTAC57 and 7GTAC77 channel sets

NOTE: Selection of the above TAC channels based on revised Table of Interoperability Channels. Channel labels are from Appendix F.

Voice subscriber units subject to multi-jurisdictional or nationwide roaming should have all I/O voice channels, including direct (simplex) mode, programmed for use.

6.12 Direct (Simplex) Mode

In direct (simplex) mode, transmitting and receiving on the output (transmit) side of the repeater pair for subscriber unit-to-subscriber unit communications at the scene does not congest the repeater station with unnecessary traffic. However, should someone need the repeater to communicate with the party who is in "direct" mode, the party would hear the repeated message, switch back to the repeater channel, and join the communications. Therefore, operating in direct (simplex) mode shall only be permitted on the repeater output side of the voice I/O channel sets.

6.13 Common Channel Access Parameters

Common channel access parameters will provide uniform I/O communications regardless of jurisdiction, system, manufacturer, etc. This national requirement shall apply to base stations and subscriber units. This shall apply to fixed or temporary operations. This shall apply to tactical, voice, or other mutual aid conventional I/O use. The secondary trunked interoperability channels are excluded in the trunked mode.

Common channel access parameters for all voice I/O shall utilize the default values (ANSI/TIA/EIA-102,BAAC-2000, approved April 25, 2000) provided in every radio regardless of manufacturer. Any common channel access parameters not provided shall be programmed accordingly. These parameters include the following:

P25 Network Access Code - \$293 (default value)
P25 Manufacturers ID - \$00 (default value)
P25 Designation ID - \$FFFFFF (designates everyone)
P25 Talkgroup ID - \$0001 (default value)
P25 Message Indicator \$000000... 0, out to 24 zeros (unencrypted)
P25 Key ID - \$0000 (default value)
P25 Algorithm ID - \$80 (unencrypted)

Any deviation from \$293 will not be permitted unless the SIEC (or the RPC) can demonstrate Plan amendment through the FCC-approved process that the intent of \$293 will be preserved on ALL conventional voice I/O channels – transmit and receive.

Section 7 – Additional Spectrum Set Aside for Interoperability in the Region

Due to the significant number of I/O channels already defined in the national planning structure, no additional I/O channels are defined at this time within Region 2. The RPC may reallocate some General Use channels for I/O use in the future if we find a need exists. If we do define additional regional I/O channels, they will fall under the same SIEC administration as the nationally defined I/O channels.

Section 8 – Allocation of General Use Spectrum

The initial allocation of spectrum in Region 2 has been based on the initial frequency packing done to populate the CAPRAD database. The initial spectrum allocation is provided in Appendix L.

Based on criteria described further in this section, and in Section 9, the Region 2 Regional Planning Committee will manage individual assignments to agencies within these areas.

The CAPRAD pre-coordination database and application flowchart will be used; see Appendix G. The RPC and the frequency coordinators are responsible for ensuring that

the information contained in the CAPRAD pre-coordination database is updated when licenses are granted or canceled and/or allotments changed.

8.1 General Provision

This portion of the plan provides a basis for proper spectrum utilization. Its purpose is to evaluate the implementation of 700 MHz radio communication systems within the region. Region 2 places greater emphasis on agencies that provide services that result in preserving personal life and property protection and such agencies will receive the highest priority.

For clarification purposes, a System is a standalone radio system that can be tied into a regional radio network. Region 2 will only evaluate Systems, and not evaluate an entire network of Systems. This will allow for an Entity to license and establish multiple Systems. Region 2 will recognize applications for Systems that will be developed at the same physical locations and providing services in the same areas, with greater than 67% overlapping coverage (based on a 40 dBu contour or area of operation for the mobile component) as a part of other Systems applied for or currently licensed by the same Entity as a single System. Applications for Systems that are developed at different locations and providing service to other areas and having less than 67% overlapping coverage (based on a 40 dBu contour or area of operation for the mobile component) are to be recognized as different Systems, even though they may be tied into the same radio network and control points. The advantage for this consideration is to allow for multiple conventional systems to be used by a regional communications network that would be separated by different areas of service. It is expected that an applicant will identify these conditions when application is made, to allow for an efficient and timely evaluation of the application. Within Region 2 are multiple communication centers that provide communications support for various agencies in geographically separate areas. Allowing for separate System development and definition in this manner will encourage the use of 700 MHz channels without the apparent penalties of needing to load each channel to the levels needed for each individual channel these entities may apply for. An Entity may then consider each System application as such and may use the same radio units for each System to qualify for loading requirements.

Systems operating in the Region 2 must comply with the FCC rules and regulations. A system of six (6) or more 12.5 kHz channels will be required to use trunking technology, as established in CFR 47, Part 90.537(a). This does not preclude that trunked systems cannot be authorized on less than six channels, or that if a system is to be constructed on six channels or greater, then it must be primarily designed as a standalone system or integrated into an existing trunked system, which can include any systems already constructed on NPSPAC 800 MHz channels.

Systems having five (5) or less 12.5 kHz channels shall be available for use as conventional channels. Systems that do not meet the loading criteria in Section 8.6 will be required to share the frequency (or frequencies) on a non-exclusive assignment

basis. The Technical subcommittee will make an effort to allow for interference protection between users if this situation exists, but will also allocate/approve use of these frequencies to users (inside and outside of Region 2) that can load channels as required, eventually changing the original licensee into a secondary user of the channels.

Channel allotments will be made on the basis of one 12.5 kHz channel for each voice channel request and one 12.5 kHz channel for each narrowband data channel request. This allows for agencies needs to be met but does not conform to the FCC intent to use technology that yields one voice path for each 6.25 kHz of spectrum. It is the responsibility of this committee to make applicants and the public safety community aware of the FCC's intent to migrate to 6.25 kHz technology.

While this plan does not limit an agency from initially implementing (if it conforms to FCC rules) a technology that yields less than one voice channel per 12.5 kHz channel or aggregating narrowband data into 25 kHz blocks, migration and an eventual mandate to 6.25 kHz voice/data technology should be anticipated by applicants.

Channels will be assigned, where possible, with a minimum of 250 kHz separation. A separation of 250 kHz provides sufficient spacing to achieve low combining losses similar to existing systems. Longer contiguous blocks or less separation between blocks could necessitate the use of higher-loss hybrid combiners, significantly raising the cost of deploying 700 MHz channels by increasing the number of RF sites required to achieve current 800 MHz RF coverage levels.

Allotments will be made in 25 kHz groups to allow for various digital technologies to be implemented. Agencies using Frequency Division Multiplexing (FDMA) will be expected to maintain 12.5 kHz equivalency when developing systems and will be required to utilize BOTH 12.5 kHz portions of the 25 kHz block. In most cases, this will require the geographical separation of each 12.5 kHz adjacent channel.

In order to promote spectrum efficiency, Region 2 will ensure that systems allocated 25 kHz channel blocks will utilize all of the channels and not "orphan" a portion of a system designated channel.

Region 2 encourages small agencies to join multi-agency systems as they promote spectrum efficiency and small and large agency capacity needs can be met.

8.2 Low Power Secondary Operations

To facilitate portable operation by any license, and to provide channels for such operation without impacting the use of primary channels, certain low power secondary use will be permitted. Any public safety entity otherwise licensed to use one or more channels under this plan may receive authorization to license any additional channel for secondary use, subject to the following criteria:

- All Operation of units on such authorized channels will be considered secondary to other licensees on both co-channel and adjacent channels.
- No channels on, or adjacent to, those designated in the Plan for wide area operation and/or mutual aid use will be authorized.
- Channels will be authorized for use in specific areas only, such areas to be within the licensees authorized operational area.
- Maximum power will be limited to 6 watts ERP.
- Applications for channels may be submitted to the Technical Committee for consideration at any time and must be accompanied by a showing of need. The committee may select and authorize licensing of these secondary use channels after consideration of potential interference to co-channel and adjacent channel allotments, allocations and licenses. Authorizations may be granted for use of any suitable channel, without prior allotment or allocations to the requesting agency.
- In the event the channels authorized for low power secondary operation are needed by others during any window opening for reassignment, no protection will be afforded to the licensed secondary user, and they may be required to change frequencies or surrender licenses to prevent interference to primary use channels.

8.3 Low Power Channels

The FCC in the 700 MHz band plan set aside channels 1–8 paired with 961–968 and 949–958 paired with 1909-1918 for low power use for the on-scene incident response purposed using mobiles and portables subject to Commission-approved regional planning committee regional plans. Transmitter power must not exceed 2 watts (ERP). Channels 9–12 paired with 969–972 and 959–960 paired with 1919–1920 are licensed nationwide for itinerant operation. Transmitter power must not exceed 2 watts (ERP).

These channels may operate using analog operation. To facilitate analog modulation this plan will allow aggregation of two 6.25 kHz channels for 12.5 kHz bandwidth. On scene temporary base and mobile relay stations are allowed (to the extent FCC rules allow) with an antenna height limit of 6.1 meters (20 feet) above the ground. However, users are encouraged to operate in simplex mode whenever possible. This plan does not limit use to only analog operations; these channels are intended for use in a wide variety of applications that may require digital modulation types.

In its dialog leading up to CFR §90.531 allocating the twenty-four low power 6.25 kHz frequency pairs (of which eighteen fall under RPC jurisdiction), the Federal Communications Commission (FCC) suggested that there is a potential for multiple low power applications, and absent a compelling showing, a sharing approach be employed

rather than making exclusive assignments for each specific application because low power operations can co-exist [in relatively close proximity] on the same frequencies with minimal potential for interference due to the 2 watt power restriction.

Whereas advantages exist in not making assignments, the reverse is also true. If, for example, firefighters operate on a specific frequency or set of frequencies in one area, there is some logic in replicating that template throughout the region for firefighter equipment. If there are no assignments, such a replication is unlikely. In seeking the middle ground with positive attributes showing up both for assignments and no assignments, we recommend the following regarding assignments associated with the eighteen narrowband channels for which the RPC has responsibility.

- Channel #'s 1-4 and 949-952 are set aside as *generic* channels for use by public safety agencies operating within Region 2, and the complementary channel #'s 961-964 and 1909-1912 are set aside as *generic* channels also for use by public safety agencies including GPS differential correction telemetry for channels 961-964 and 1909-1912 likewise operating within Region 2.
- Channel #'s 5-8 are designated as *Fire Protection / EMS* channels for licensing and exclusive use by the Fire Protection / Emergency Medical Services discipline, and the complementary channel #'s 965-968 are set aside as *Law Enforcement* channels also for licensing and exclusive use by the Law Enforcement discipline.
- Channel #'s 955-956 are set aside as *Fire Protection / EMS* channels for licensing and exclusive use by the Fire Protection / Emergency Medical Services discipline, and the complementary channel #'s 1915-1916 are set aside as *Law Enforcement* channels also for licensing and exclusive use by the Law Enforcement discipline. Channel #'s 957-958 are set aside as *Fire Protection / EMS / Law Enforcement*. Simplex operations may occur on either the base or mobile channels. Users are cautioned to coordinate on scene use among all agencies involved and should implement the NIMS (National Incident Management System). Users should license multiple channels and be prepared to operate on alternate channels at any given operational area.

8.4 System Implementation

After allocation of channels, the agency must sign a contract with a vendor within one year of channel allocation. If an agency does not implement in the timeframes specified, that agency's allotment may be removed from the allotment list. An Agency may file a request with the Region Chair for an extension of time to implement. The request should include all details describing why the agency has not implemented and a new implementation schedule. The Committee Chair will advertise this request and set a date for the full committee to vote on the request. If no request for extension is received or the Committee votes not to extend implementation, the Committee Chair will advertise this action and set a filing window to give other agencies a chance to request an allotment of that spectrum.

Should system implementation not begin within two (2) years or if projected planned channel loading is not attained within four (4) years after granting of license, the channels will be returned for re-allotment to others. A one (1) year extension may be supported by the RPC, if it can be shown that circumstances are beyond the control of the applicant. The applicant will be responsible for contacting the FCC to request an extension. Applicants must be acting to the extent of their power to implement the project within their authority.

8.5 Priority for Receiving Spectrum Allocations

Priority for channel allocations will be made on a first come first serve basis. Cooperative multi-agency system implementations will be given priority over non-shared single agency systems. Refer to Section 5.3 for priority list.

When applying for the new 700 MHz channels, the RPC expects applicants to relinquish any amount of any currently used spectrum and make that spectrum available for use by other agencies in Alaska upon beneficial use of an implemented 700 MHz radio system. This currently licensed spectrum may be in any public safety band.

Agencies with a primary voice communication system operating under a NPSPAC band 800 MHz license, which are requesting 700 MHz channels for system expansion, are not asked to relinquish this spectrum but will be asked to include this spectrum that is already licensed into the loading requirements for a radio system as defined in this plan. The reason for this requested inclusion is that most, if not all, radio equipment developed for the 700 MHz band is expected to be also capable of operation on any existing 800 MHz NPSPAC licensed systems already in use and will likely to be included in justification of the loading of NPSPAC channels. Without this inclusion, it would theoretically be possible for an agency to double its frequency spectrum allocations by applying for an equivalent number of 700 MHz channels, for each 800 MHz channel that it has already licensed and justified loading criteria for, and reuse the same mobile or portable users for both bands, to both planning committees, in Alaska. Although separated in FCC rules and regulations, Region 2 will work with NPSPAC planning committees to attempt to make the most efficient use of spectrum for Public Safety in Region 2.

Agencies are encouraged to relinquish frequencies that will no longer be used as soon as possible in accordance with FCC rules and regulations.

The number of channels an applicant should retain would be an amount required to provide minimum interoperable communications to surrounding jurisdictions. In order to promote the interests of agencies that will benefit from an applicant submitting a request for 700 MHz spectrum, it is requested that the applicant submit a list of all channels and licenses held on existing public safety channels, and those channels that will be expected to be unlicensed when full beneficial use of 700 MHz channels are realized. The RPC will only distribute this information, and not decide if it is sufficient

or not. It must be stressed that the Region 2 Regional Planning Committee supports and promotes multi-agency systems that allow for regional/wide-area coverage within the region.

8.6 Channel Loading

The RPC recognizes the FCC's increased focus on spectral efficiency standards versus absolute loading of each 700 MHz frequency assignment. It is however, the goal of the RPC to encourage efficient utilization of each frequency channel irrespective of bandwidth and therefore encourages the following:

- Each applicant for a trunked system should design their system for a minimum of 70 mobile or portable radios for each 12.5 kHz voice channel that will be placed in service within five (5) years of the initial plan approval date.
- Single conventional channels should be designed for a minimum load of 70 radios per 12.5 kHz channel. Mobile, portable, data, and control stations will all be considered within this count. Channel loading will eventually be required to change to 70 units per 6.25 kHz channel, when further narrowband technologies are available and when the FCC requires that 6.25 kHz is identified as a single voice channel (vs. 12.5 kHz at this time).

Section 9 APPLICANT REQUIREMENTS AND EVALUATION

The applicant evaluation criteria established in the NCC process, and as further defined in this plan, will be followed for approval. All requests will be considered on a first come first serve basis. In cases, where specific frequency allotments are required by numerous applicants at the same time, the applicant evaluation matrix point system will be utilized to determine the successful applicant. In all cases, area of coverage, technical requirements, and channel loading criteria will be applied. Exceptions may apply upon unique circumstances, after review and approval by the RPC. Deviations from FCC rules are not to be approved unless a fully justified waiver request has been presented to the RPC. The Region 2 Technical subcommittee will evaluate and process applications within thirty (30) days after receipt.

The matrix has been prepared to enable consistent evaluation of plans and applications. Variations within the parameters of this plan and submitted applications and/or plans may require extensive evaluation. Therefore, it shall be responsibility of the RPC to evaluate each situation on its own merit.

Each applicant for a trunked system shall certify that a minimum of 70 field radios for each 12.5 kHz channel will be placed in service within five (5) years of the initial plan approval date. If that is not the case, then less than fully loaded channels shall be returned to the allotment pool and the licensee shall modify their license accordingly. Conventional channels shall be loaded to 70 mobile units per channel. Where an applicant does not load a channel to 70 radio/subscriber units, the channel will be

available for assignment to other licensees. Mobile, portable and control stations will be considered as mobile units.

9.1 Region 2 Application Requirements

Each application must contain the following:

- FCC ULS 601 Form(s)
- Explanation of the systems future growth for all agencies involved in the system, including how the system will be loaded and what equipment type and quantity is planned to be purchased to load the system.
- Explanation of the budget commitment for the proposed system.
- Statement of compliance the applicant's agency will conform with interoperability requirements of the SIEC plan;
- Any documentation that identifies intended radio channels the agency/entity will be abandoning through the FCC licensing processes, after full beneficial system use of allocated 700 MHz channels, for informational purposes only, and the benefit of other Entities with Region 2.
- Documentation that will assist the evaluation of the application against the Point Matrix system identified in Section 9.2

Applications will be submitted to the RPC for evaluation. Upon approval by the RPC the application will be forwarded to the Applicant's designated coordinator for technical review and any appropriate information will be uploaded to CAPRAD. Upon approval by the coordinator the Applicant may submit to the FCC for licensure. Any conflicts encountered during the licensing process, after Regional approval, the application will be returned to the RPC for resolution with the applicant.

9.2 Evaluation Matrix Point System

Region 2 will use a point system to determine approval priority of competing applications within the region. The maximum total points that can be achieved are 900. The applications receiving the highest point total will receive approval for the channels. Seven categories will be evaluated.

Where applicable, such as in multiple discipline shared systems, the points for all agencies utilizing the system are included in the total.

1. Service and Use (Maximum score 300 points)

<u>Service</u>	<u>Points</u>
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Local	20
Borough	20
State	20
Federal	20

<u>Use</u>	<u>Points</u>
Criminal Justice/Law Enforcement/Crisis Mgmt	50
Fire/EMS	50
Special Emergency	40
Emergency Management	30
Forestry Conservation	30
Highway Maintenance	20

Maximum Total 300

Environmental protection will fall in the "Special Emergency" category and shall be considered for tasks that directly reduce contamination to the air, water or ground by chemicals or waste materials.

2. Interoperability Communications (Maximum score 100 points)

The application is scored on the degree of interoperability that is demonstrated, with a range of points from 0 to 100. This category will not rate the application on the inclusion of interoperability channels, but on its proposed actual ability to communicate with different levels of government and services during a time of emergency.

Each applicant is encouraged to have direct mobile-to-mobile communications among these radio type functions; local, state and federal in the criminal justice, fire/EMS, special emergency, emergency management, forestry, highway maintenance, and general government. All applicants will start with 100 points and points will be deducted based upon their lack of intersystem communications. No points will be deducted if a plan or system has not yet been developed within their areas of service.

- Ten (10) points will be deducted for each radio service type function in which the applicant lacks intersystem communication, if direct mobile-to-mobile does not exist.
- Five (5) points for each radio service that the applicant lacks direct mobile-to-mobile communications.

3. Loading (Maximum score 150 points)

Those applicants who have demonstrated that they are part of or developing cooperative multi-agency system will be scored on a range from 0 to 150 points depending upon the extent of the cooperative system.

Mutli-agency trunked, fully loaded	101 – 150 points
Trunked system, fully loaded, single agency	76 – 100 points
Mobile data channel fully loaded/channel	76 – 100 points
Conventional system fully loaded/channel	0 – 75 points

Expansion of existing systems will be evaluated as to the aforementioned category they are in. Any system less than fully loaded will have its score multiplied by the proportion:

Fully loaded/channel is a 12.5 kHz channel with 70 radio units. Control channels shall be considered as data channels. Plans submitted to the RPC shall stipulate the number of voice communication channels and the number of data channel(s). These points will only be assigned to fully loaded systems that are planned and identified with the application package submittal.

4. Spectrum Efficiency (Maximum score 50 points)

The applicant will be scored on the degree of spectrum efficient technology that the system demonstrates. A trunked system will be considered a spectrum efficient technology as well as any technological systems feature that is designed to enhance the efficiency of the system and improve the efficient use of spectrum.

Spectrum efficiency points

Trunked or equally high efficient technology	50 points
Conventional system using data	50 points
Technologies that increases system throughput	50 points

5. System Implementation Factors (Maximum score 100 points)

This category scores the applicant on two factors, budgetary commitment and plan completeness. The degree of budgetary commitment is scored on a range from 0 to 50 points based on the RPC's evaluation of commitment demonstrated through documentation by the applicant and its funding source entity. A high degree of funding commitment will receive a higher score. Applicants will also be scored on the degree of plan completeness on a range from 0 to 50 points. Applicants must submit a timetable for the implementation of the system. Applicants should be aware of the "Slow Growth Plan" requirements outlined in the FCC rules.

Multi phase project with funds committed to all phases	50 points
Multi phase project plan completed for all phases	50 points

Applicants with less than complete funding commitment and/or incomplete plans will have their point score reduced accordingly. Resolutions, legislation, or other such documentation from governing entities shall be submitted with applications to support financial commitment.

6. System Density (Maximum score 100 points)

Each applicant's System will be scored on the level of geographic efficiency for requisite communications coverage for the applicant's jurisdictional area served or regional area served under agreement with other Agencies and/or defined

communication requirements. Scoring will be based upon the defined radio coverage area of the application and the Entity's jurisdictional area (or required communication support areas). Region 2 recognizes that each Entity may not be required (by System or network users) to provide radio System communication support for all jurisdictional boundaries or areas that are supported by that Entity. This evaluation is to only weigh the efficiency of the applied for System against the required areas for communication support based on System user requirements or other Entity licensed or applied for Systems. Scores are based on the ratio multiplied by 100 with the maximum not to exceed 100 points.

Percentage of System operational area for applicant's jurisdictional area of responsibility for communications support x 100 = _____

7. Givebacks (Maximum 100 points)

This category will be based on the number of channels given back, the extent of availability, and usability of those channels to others.

Total evaluation points above add up to 900.

9.3 Application Processing

All applications will be processed in the most expeditious manner possible by the RPC. After Region 2 approval, the applications will be sent to the coordinator requested by the applicant. All documentation required by the designated coordinator selected in this process will be available through the CAPRAD system. Subsequent to coordination approval the FCC will grant the license(s) to the applicant.

Section 10 – An Explanation of How all the Region Eligibles' Needs were Considered, and to the extent possible met

As described elsewhere in this Plan, the initial allocation of channels in the narrowband general use category in Region 2 was made through the CAPRAD pre-packing process that utilized a combination of population, geography, and signal propagation parameters to determine channel distribution. Over the course of nine (9) meetings of the RPC during the drafting of the textual portions of this plan, participants were asked to comment on the spectrum needs of their agencies in the 700 MHz band and any agencies they were aware of in their geographic area. Consistently, the comments received indicated that there is adequate spectrum distribution across the Region to meet the foreseeable needs of the eligible users.

Section 11 – Evidence that the plan has been successfully coordinated with adjacent regions

There are no adjacent regions to Alaska, Region 2.

The area along the border of Alaska and Canadian is very sparsely populated. Adequate spectrum for public safety communications is available in this area.

The Region 2 RPC will work with the 821 RPC to encourage utilization of the 821 MHz allocation, where practicle.

Section 12 – Detailed Description of How the Plan Put Spectrum to the best possible use

As described elsewhere in this Plan, the initial allocation of channels in Region 2 was made through the CAPRAD pre-packing process that utilized a combination of population, geography, and signal propagation parameters to determine channel distribution. Population is the most significant driver in predicting call for service demands on public safety agencies and call for service demand is one of the largest drivers in the need for spectrum. Terrain and distances are also factors for consideration for channel reuse and spectrum reutilization in the county-like areas of Region 2 which can contain thousands of square miles. These considerations will be taken during system design and coordination/licensing to assure the most efficient use of the spectrum and meet the spectrum demands of the public safety agencies within those areas.

The RPC believes that utilizing the CAPRAD pre-packing for initial channel allocation of the narrowband spectrum, on a county-area basis, and the subsequent filing-window processing of applications for specific channel assignments, will result in the most efficient use of the spectrum as well as meeting the broadest set of needs of the eligible users of the spectrum.

Section 13 – Detailed description of the future planning process, including but not limited to the amendment process, meeting announcements and minutes, database maintenance and dispute resolution

13.1 Future Planning & Minutes

Region 2 will use the CAPRAD website to post plan documents, Bylaws, meeting schedules, meeting minutes and application filing procedures.

13.2 Database Maintenance

Region 2 will use the NLECTC pre-coordination database, specifically designed for use in the 769-775/799-805 MHz public safety band. This database will contain frequency availability and preallotment.

The FCC's designated public safety frequency advisors will use the NLECTC pre-coordination database during the application process (pre-coordination). Frequency advisors, as well as RPCs, will be required to maintain the database as the applications are processed and granted by the Commission.

13.3 Regional Committee Dispute Resolution Process

13.3.1 Introduction

The Regional Committee is established under section 90.527 of the FCC's rules and regulations. It is an independent Committee apart from the Federal Communications Commission with authority to evaluate application for public safety uses of the spectrum allocated under FCC Docket 96-86. In addition, appeals from decisions made with respect to a variety of matters regulated by the Regional Committee will be heard. The formal requirements of the appeal process are set out below.

In order to ensure that the appeal process is open and understandable to the public, the Regional Committee has developed this procedure. Those involved in the appeal process can expect the Committee and its members to follow the procedures (as may be amended from time to time). Where any matter arises during the course of an appeal that is not dealt with in this document, the Committee will do whatever is necessary to enable it to adjudicate fairly, effectively and completely on the appeal. In addition, the Committee may dispense with compliance with any part or all of a particular procedure where it is appropriate in the circumstances. As the Committee gains experience, it will refine and, if necessary, change its policies. Any changes made to the procedure will require a modification to the Regional Plan and will be made available to the public.

The Regional Committee will make every effort to process appeals in a timely fashion and issue decisions expeditiously.

13.3.2 Appeals Committee

13.3.2.1 Members

The Regional Chair may organize the Committee into Sub-Committees, each comprised of one or more members, the Appeals Sub-Committee is one of those Sub-Committees.

Where an appeal is scheduled to be heard by this Sub-Committee the chair is determined as follows:

(a) if the chair of the Committee is on the Sub-Committee, he/she will be the chair;

(b) if the chair of the Committee is not on the Sub-Committee but the vice-chair is, the vice-chair will be the chair; and

(c) if neither the chair nor the vice-chair is on the Sub-Committee, the Regional Committee will designate one of the members to be the chair.

13.3.2.2 Withdrawal or Disqualification of a Committee Member on the Grounds of Bias

Where the chair or a Committee member becomes aware of any facts that would lead an informed person, viewing the matter reasonably and practically, to conclude that a member, whether consciously or unconsciously, would not decide a matter fairly, the member will be prohibited from conducting the appeal unless consent is obtained from all parties to continue. In addition, any party to an appeal may challenge a member on the basis of real or a reasonable apprehension of bias.

13.3.2.3 Correspondence (Communicating) with the Committee

To ensure the appeal process is kept open and fair to the participants, any correspondence to the Regional Committee must be sent to the Chair and be copied to all other Committee members and other parties to the appeal, if applicable. Committee members will not contact a party on any matter relevant to the merits of the appeal, unless that member puts all other parties on notice and gives them an opportunity to participate. The appeal process is public in nature and all meetings regarding the appeal will be open to the public.

13.3.3 The Appeal Process

13.3.3.1 What can be appealed

The Committee hears appeals from a determination or allocation and shall include the following:

- number of channels assigned,
- ranking in the assignment matrix,
- interference,
- any other criteria that the region shall establish.

13.3.3.2 Who can appeal

An official of the entity who filed the original application to the Regional Committee must be the person who files the appeal on behalf of the entity.

13.3.3.3 How to appeal

A notice of appeal must be served upon the Regional Committee. The notice of appeal may be "delivered" by mail, courier, or hand delivered to the office of the Chair and Members of the Committee as listed in the Official Membership List. The Committee will also accept a notice of appeal by facsimile to the Chair and Secretary with the original copy of the notice of appeal served as indicated above.

Certain things must be included in a notice of appeal for it to be accepted. The notice of appeal **must** include:

1. The name and address of the appellant;
2. The name of the person, if any, making the request for an appeal on behalf of the appellant;
3. The address for service of the appellant;
4. The grounds for appeal (a detailed explanation of the appellant's objections to the determination - describe errors in the decision);
5. A description of the relief requested (What do you want the Committee to order at the end of the appeal?);
6. The signature of the appellant or the appellant's representative.

13.3.3.4 Time limit for filing the appeal

To appeal a determination or allocation the entity who is subject to the determination must deliver a notice of appeal **within three weeks** after receiving the decision. If a notice of appeal is not delivered within the time required, the right to an appeal is lost. However, the Committee is allowed to extend the deadline, either before or after its expiration based upon a majority plus one vote of the Committee.

13.3.3.5 Extension of time to appeal

The Committee has the discretion to extend the time to appeal either before or after the three week deadline. A request for an extension should be made to the Committee, in writing, and include the reasons for the delay in filing the notice of appeal and any other reasons which the requester believes support the granting of an extension of time to file the appeal. A request for an extension should accompany the notice of appeal.

In deciding whether to grant an extension, the Committee will consider whether fairness requires an extension. The Committee will take into account the length of the delay, the adequacy of the reasons for the delay, the prejudice to those affected by the delay and any impacts that may result from an extension. Other factors not identified could be relevant depending on the circumstances of the particular case.

13.3.3.6 Rejection of a notice of appeal

The Committee may reject a notice of appeal if:

- (a) it is determined that the appellant does not have standing to appeal;
- or
- (b) the Committee does not have jurisdiction over the subject matter or the remedy sought.

Before a notice of appeal is rejected, the Committee will inform the appellant of this in writing, with reasons, and give the appellant a three-week opportunity to make submissions and any potential parties with an opportunity to respond.

13.3.3.7 Adding parties to the appeal

In addition to the parties mentioned above, the Committee has the discretion to add any other person who may be "affected" by the appeal as a party to the appeal. Anyone wanting to obtain party status should make a written request to the Committee as early as possible. The written request should contain the following information:

- a. The name, address, telephone and fax number, if any, of the person submitting the request;
- b. A detailed description of how the person is “affected” by the notice of appeal and
- c. The reasons why the person should be included in the appeal; and
- d. The signature of the person submitting the request.

13.3.3.8 Intervener status

The Committee may also invite or permit someone to participate in a hearing as an intervener. Interveners are generally individuals or groups that do not meet the criteria to become a party (i.e. “may be affected by the appeal”) but have sufficient interest in, or some relevant expertise or view in relation to the subject matter of the appeal.

Someone wanting to take part in an appeal as an intervener should send a written request to the Committee. The written request should contain the following information: (to be determined by RPC)

Prior to inviting or permitting a person to participate in a proceeding as an intervener, or deciding on the extent of that participation, the Committee will provide all parties with an opportunity to make representations if they wish to do so.

13.3.3.9 Type of appeal (written or oral) hearing

An appeal may be conducted by way of written submissions, oral hearing or a combination of both. The Committee will determine the appropriate type of appeal after a complete notice of appeal has been received.

The Committee will normally conduct an oral hearing although it may order that a hearing proceed by way of written submissions in certain cases. Where a hearing by written submissions is being considered by the Committee, the Committee may request input from the parties.

13.3.3.10 Burden of proof

The general rule is that the burden or responsibility for proving a fact is on the person who asserts it.

13.3.3.11 Notification of expert evidence

The Committee requires any party that intends to present expert evidence at a hearing to provide the Committee, and all other parties to the appeal, with reasonable advance notice that an expert will be called to give an opinion. The notice should include a brief statement of the expert's qualifications and areas of expertise.

If a party intends to produce, at a hearing, a written statement or report prepared by an expert, a copy of the statement or report should be provided to the Committee and all parties to the appeal within a reasonable time before the statement or report is given in evidence. Unless there are compelling reasons for later admission, expert reports should be distributed 30 days prior to the hearing date.

13.3.3.12 Documents

If a party will be referring to a document that was not provided to the Committee and all parties prior to the hearing, sufficient copies of the document must be brought to the hearing for the Committee and all other parties.

13.3.4 Appealing the Appeals Subcommittee's Decision

If a party is not satisfied with the decision of the Region's Appeals Subcommittee's Decision, he or she can appeal that decision to the 700 MHz National Planning Oversight Committee.

Section 14 – Certification by the Chairperson that Regional Planning Process was Open to the Public

I hereby certify that all Region 2 Regional Planning Committee meetings, including subcommittee or executive committee meetings were open to the public.

Signed _____
Region 2 Chairperson

Witnessed _____
Region 2 Vice Chairperson